## SOUTH CAROLINA COMMUNITY MITIGATION PLAN NARRATIVE

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The information provided in this plan template is excerpted from the South Carolina Mass Casualty Plan, Appendix 5 of the South Carolina Emergency Operations Plan, Annex 2, Pandemic Influenza Plan and appropriate Standard Operating Procedures. Narrative information included in the required descriptions is summarized from planning and preparedness activities and reference documents. References and links are provided when appropriate.

Operational procedures related to community containment have been developed as separate SOPs.

#### I. **Executive Summary**

In 1999, shortly after the first reports of human cases of a highly pathogenic strain of avian influenza in Hong Kong, South Carolina began developing a draft response plan for pandemic influenza. The state emergency operations plan for pandemic influenza was published in November 2004. In November 2005, the national pandemic influenza plan was released and preparedness efforts intensified. In South Carolina, state and local planning summits were held to draw attention to the critical and comprehensive preparedness plans needed for a pandemic. Regional and county pandemic influenza plans have been drafted and exercised.

South Carolina Department of Health and Environmental Control (DHEC) staff have presented educational programs and have conducted a media campaign to educate partner organizations and the general public about the effects of a pandemic, how to minimize its effects with community mitigation strategies and how to plan for it. The state is stockpiling antiviral medications, personal protective equipment, infection control supplies, medical supplies and equipment for use in a pandemic. Influenza surveillance and monitoring activities have been stepped up. Laboratory testing capacity for influenza-like illnesses has been increased.

Planning with partners began in 2002 with the establishment of the **State Bioterrorism Advisory Council (now the State Public Health Preparedness** Advisory Council/Pan Flu Coordinating Council). In November 2005, the Advisory Council agreed to serve as the State Pandemic Influenza Coordinating Committee. This Council is the venue for DHEC to receive input and participation at the state level by private, governmental, and nonprofit organizations. The membership of the Council includes (but is not limited to) representatives from:

State Department of Education

SC Chapter of the American Red Cross (as well as some local chapters)

SC Association of Counties

private corporations such as Blue Cross and Blue Shield of SC, Progress Energy, and **Roche Pharmaceuticals** 

Catawba Indian Nation

Chamber of Commerce

SC Department of Mental Health

SC Department of Public Safety

Federal Bureau of Investigation, Columbia Div.

hospital representatives

SC Air National Guard (ANG)

SC Area Health Education Consortium

SC Army National Guard

**SC** Baptist Convention

SC Budget and Control Board

SC Chamber of Commerce

SC College of Emergency Physicians

SC Coroner's Association

SC Department of Agriculture

SC Department of Labor, Licensing, and Regulation

SC Department of Natural Resources

SC Emergency Management Division

**SC EMS Association** 

SC Governor's Office

SC Health Care Association

SC Hospital Association

**SC** Medical Association

SC Law Enforcement Div. – Homeland Security Grants

SC Lieutenant Governor's Office on Aging

University of South Carolina (USC) – Center for Public Health Preparedness

University of South Carolina (USC)- School of Medicine

Clemson University

Medical University of South Carolina

**USDA** 

DHEC eight regions

Appropriate DHEC offices

Subcommittees on Disease Control, Mass Casualty Planning, Training, and Agroterrorism were tasked with specific pandemic preparedness activities.

The Disease Control Subcommittee, comprised of hospital infection control practitioners and nurses, hospital laboratorians, DHEC epidemiologists, physicians, and other professionals is the body responsible for advising processes and recommendations related to personal protective equipment and disease control policies affecting community containment actions. This committee has approved agency recommendations on PPE for health care workers and strategies for community containment based on the CDC's "Interim Pre-pandemic Planning Guidance." See Table 1: Examples of Social Distancing and Containment Measures and Triggers for Pandemic Severity Levels 1, 2, and 3 and Table 2: Social Distancing and Containment Measures and Triggers, Pandemic Severity Index 4 and 5, pages 21 through 26.

The DHEC Division of Acute Disease Epidemiology and the South Carolina Department of Education Office of Youth Services Healthy Schools Program have met to develop a joint Standard Operating Procedure for school closures during a pandemic. Discussions have led to the development of a specific School Closure Task Force that is responsible for addressing the issue of school closure during a pandemic, surveillance coordination and the re-opening of schools. It is important to note that although the state Department of Education is striving to develop guidelines for schools during a pandemic, South Carolina is a home rule state. The State Department of Education does not have authority to close local schools. Unless the Governor declares a state of emergency or a public health emergency and triggers the Emergency Health Powers Act, the only entities with authority to close schools are the local school superintendents. Planning with this committee began in 2006 and continues as guidance from DHHS is released and updated.

The Training Advisory Subcommittee (TASC) consists of multiple government and private agencies, including business and education partners. The Subcommittee has been tasked with determining and meeting the training needs of response personnel across the state. In 2006, it was tasked by the Pandemic Influenza Coordinating Council with providing pandemic influenza information and educational materials to external partners. Subcommittees on Business, Health Care, and Schools were established to work with partners to identify education and resource needs within these sectors and, when appropriate, to provide these resources through membership distribution networks. As a result, pandemic influenza planning toolkits, pocket guides, posters, and DVD's were provided to businesses, healthcare facilities, and schools through educational presentations and other community networks. TASC also used it searchable website, <a href="www.SCPrepares.org">www.SCPrepares.org</a> to list pandemic influenza training and resources. This Subcommittee continues to develop tools and resources, provide planning guidance to its current partners and tot invite additional partners to participate in the committee's work.

The Mass Casualty Planning Subcommittee's membership includes state and regional (local) public health emergency planners, hospital personnel and other state emergency planners. This Subcommittee reviews regional mass casualty plans to ensure that they meet state emergency response guidelines and appropriately address the elements of pandemic preparedness. In the area of medical surge capability, this Subcommittee has accomplished a great deal related to the deployment of six Mobile Medical Units and the development of Alternate Care Sites (ACS) in South Carolina. Under the Mass Casualty Subcommittee's oversight, guidelines for maintenance, security, and deployment of Mobile meds have been prepared. The Mobile Med Units may be deployed to any region of the state and are exercised on a schedule set under DHEC's State Exercise Plan. For ACS planning, this Subcommittee has developed guidelines for defining/typing alternate care sites and facilitating a process for approving the establishment of ACS for use within the mass casualty regions and by the state's healthcare facilities. The Subcommittee's planning activities are ongoing.

The Agroterrorism Subcommittee works with agricultural and food safety partners in private and public organizations to develop pandemic plans related to biosecurity measures and avian influenza response. Committee members with expertise in domestic and wild animals, domestic poultry and livestock health are continually available as a resource to provide education programs and answer the public's questions in matters related to Avian Influenza and related issues. The planning activities of the subcommittee are ongoing.

#### II. Introduction

(excerpt from Pandemic Influenza Plan, Annex 2, of the South Carolina Mass Casualty Plan, Appendix 5 of the South Carolina Emergency Operations Plan.)

- A. An Influenza pandemic is an outbreak of a novel Influenza virus that has worldwide consequences. Influenza pandemics present special requirements for disease surveillance, rapid delivery of vaccines and antiviral drugs, allocation of limited medical resources, and expansion of health care services to meet a surge in demand for care.
- B. Pandemics occur in the following six phases defined by the World Health Organization and the Centers for Disease Control and Prevention: Interpandemic Period (Phases 1 and 2), Pandemic Alert Period (Phases 3, 4, and 5), and Pandemic Period (Phase 6). Distinguishing characteristics of each phase are described below. The phases will be identified and declared at the national level for the purposes of consistency, comparability, and coordination of response.
- C. The World Health Organization (WHO) has developed a global influenza preparedness plan, which defines the stages of a pandemic, outlines the role of WHO, and makes recommendations for national measures before and during a pandemic.

The distinction between **phases 1 and 2** is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the virus is enzootic or epizootic, geographically localized or widespread, and other scientific parameters.

The distinction among **phases 3**, **4**, and **5** is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and other scientific parameters.

In order to describe its approach to the pandemic response, the federal government characterized the stages of an outbreak in terms of the immediate and specific threat a pandemic virus poses to the United States population. The chart below shows the relationship of the federal government response to the WHO Phases and the appearance of the disease in the United States.

Additionally, SC DHEC further breaks down the WHO Phases/Federal Government Response Stages to define the appearance of the pandemic virus in or near South Carolina. This breakdown is used particularly to trigger SC DHEC epidemiological and community containment responses.

D. Planning guidance and assumptions are based on information provided by the U. S. Department of Health and Human Services in the "HHS Pandemic Influenza Plan – November 2005", by the Homeland Security Council in the "National Strategy for Pandemic Influenza Implementation Plan" and by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) in the "Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States—Early, Targeted, Layered Use of Nonpharmaceutical Interventions." South Carolina has correlated sub-phases to direct emergency operations specific for South Carolina's Emergency Operations Plans.

The WHO phases, related Federal Government stages and South Carolina subphases are:

WHO Global Pandemic Phases and the Stages for Federal Government Response and Corresponding South Carolina Response					
	WHO Phases Federal Government Response Stage				
Inter P	andemic Period		•		
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk		
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		country		
Panden	nic Alert Period				
3	Human infection(s) with a new subtype, but no human-to-human spread, or at	0	New domestic animal outbreak in at-risk country		
3	most rare instances of spread to a close contact.	1	Suspected human outbreak overseas		
4	Small cluster(s) with limited human-to- human transmission but spread in highly localized suggesting that the virus is not well adapted to humans.				
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	2	Confirmed human outbreak overseas		
Panden	nic Period				
	Pandemic phase: increased and sustained transmission in general population	3	Widespread human outbreaks in multiple locations overseas		
		4	First human case in North America  a. First case in CDC Region IV*, but not in South Carolina		
6		5	Spread throughout United States  a. First case in South Carolina b. Localized clusters in South Carolina c. Widespread cases in South Carolina		
		6	Recovery and preparation for subsequent waves		

<sup>\*</sup>CDC Region IV states include: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

The four traditional phases of emergency management can be matched with the six phases of a pandemic in the following way:

- 1. Preparedness Interpandemic (WHO Phases 1 and 2)
- 2. Response Pandemic Alert (WHO Phases 3, 4 and 5) Pandemic (WHO Phase 6)
- 3. Recovery Pandemic Over and Interpandemic (WHO Phases 1 and 2)
- 4. Mitigation Interpandemic (primarily) (WHO Phases 1 and 2)
- D. In addition to the planning recommendations using WHO pandemic phases, the US Centers for Disease Control and Prevention has issued a planning document that outlines a Pandemic Severity Index (PSI), characterizing the possible severity of a pandemic. The index uses case fatality ratio as the critical driver for categorizing the severity of a pandemic. In this index, pandemics will be assigned to one of five discrete categories of increasing severity (Category 1 to Category 5).

Pandemic Severity Index (PSI)						
Category of	Case Fatality Ratio	Projected Number of				
Pandemic		Deaths, SC Estimated				
		Population 2005				
		(4,260,000)				
Category 5	> 2.0%	> 25,560				
Category 4	Category 4 1.0 - < 2.0% 12,780 - < 25,560					
Category 3 0.5 - < 1.0% 6,390 - < 12,780						
Category 2	0.1 - < 0.5%	1,278 - < 6,390				
Category 1	< 0.1%	< 1,278				
Don CDC interim Dra mandamia Dlanning Chidanaa thaga figuraa agayma						

Per CDC interim Pre-pandemic Planning Guidance, these figures assume a 30% illness rate and unmitigated pandemic without interventions

The interim guidance in which this index was submitted provides planning recommendations for specific community containment interventions that may be used for a given level of pandemic severity. Planning considerations included in this document are based on the possible severity of the event.

E. Assistance in response to an influenza pandemic consists of health and medical resources, including transportation assets, temporarily realigned from established programs having coordination or direct service capability for communication of medical information, disease surveillance, vaccine delivery, distribution of medications, public health authority and disease control.

- 1. COMMUNICATION OF MEDICAL INFORMATION refers to both the information flow within the public health community and the provision of critical information to the public. Appropriate and timely messages to the public are an essential element of Community Containment.
- 2. DISEASE SURVEILLANCE refers to the voluntary and required systematic reporting and analysis of signs, symptoms, and other pertinent indicators of illness to identify disease and characterize its transmission.
- 3. VACCINE PROGRAMS refers to acquisition, allocation, distribution, and administration of influenza vaccine, and monitoring the safety and effectiveness of influenza vaccinations. Vaccine programs are established as part of community containment measures.
- 4. DISTRIBUTION OF MEDICATIONS AND OTHER CDC APPROVED COUNTERMEASURES refers to the acquisition, apportionment, and dispensing of pharmaceuticals (other than vaccines) and other countermeasures such as personal protective equipment, IV fluids and ventilators to lessen the impact of the disease and also to minimize secondary infection. This includes strategies involving both antiviral medications and antibiotics. These strategies are used as part of community containment measures.
- 5. PUBLIC HEALTH AUTHORITY AND DISEASE CONTROL refers to the aspects of pandemic response requiring executive decisions and recommendations for social distancing, such as:
  - a. ordering and enforcing *quarantine*, which is the separation and restriction of movement of persons who, while not yet ill, have been exposed to an infectious agent and therefore may become infectious;
  - b. ordering and enforcing *isolation*, which is the separation of persons who have a specific infectious illness from those who are healthy and the restriction of their movement to stop the spread of that illness;
  - c. ordering the release of medical information for epidemiological investigation;
  - d. expanding or lifting regulations and licensure requirements to allow for the expansion of medical services; and
  - e. ordering expansion of medical services under emergency conditions

- f. issuing other lawful directives in support of the response.
- g. recommending other or additional nonpharmaceutical containment strategies and other measures applied to an entire community or region, designed to reduce personal interactions and thereby transmission risk;
- h. recommendations for school and public institution closings;
- 6. MASS FATALITY MANAGEMENT during a pandemic influenza refers to the local and statewide management and identification of human remains during the weeks of the waves of a pandemic and will overwhelm local and regional resources. Actions listed in Annex 2, Pandemic Influenza, are specific to mass fatalities during a pandemic. The general plan for mass fatality management is included as Annex 4 in the South Carolina Mass Casualty Plan, Appendix 5 to the South Carolina Emergency Operations Plan.

End Excerpt

#### **III.** Planning Assumptions

#### A. Situation

- 1. The projected peak transmission period for a pandemic influenza outbreak will be 6 to 8 weeks. At least two pandemic disease waves are likely. Following the pandemic, the new viral subtype is likely to continue circulating and to contribute to seasonal influenza.
- 2. Considering South Carolina's estimated 2007 population of 4,320,593 and based on a population attack rate of 15-40%, South Carolina could anticipate between 648,000 and 1.73 million cases of influenza during the peak transmission period. Illness rates will be highest among school-aged children (about 40%) and decline with age. Among working adults, an average of 20% will become ill during a community outbreak.

For the purposes of planning at the local and state levels, using 2007 population estimates, a 30% illness rate (as cited in planning assumptions by DHHS) could reflect the following:

Statewide (42 counties/4,320,593 population): 1,296,178 persons Region 1 (8 counties/467,598 population): 140,279 persons Region 2 (5 counties/884,891 population): 265,467 persons Region 3 (7 counties/845,496 population): 253,649 persons Region 4 (10 counties/552,667 population): 165,800 persons Region 5 (6 counties/307,362 population): 92,209 persons Region 6 (3 counties/334,792 population): 100,438 persons Region 7 (3 counties/603,178 population): 180,953 persons Region 8 (4 counties/224,589 population): 67,377 persons

3. On average, infected persons will transmit infection to approximately two other people.

#### **B.** Assumptions

- 1. Susceptibility to the pandemic influenza subtype will be universal.
- 2. All persons will lack immunity and will likely require two doses of the influenza vaccine.
- 2. After receipt of the influenza vaccine, the goal is to vaccinate the entire population of South Carolina over a period of four months on a continuous, prioritized basis.
- 3. When influenza vaccine becomes available, initial supplies will not be sufficient to immunize the whole population and prioritization for vaccine administration will be necessary.

- 4. Antiviral medications may play a significant role in disease control operations.
- 5. Public health clinics will be the predominant locations for influenza vaccine administration during the first month of vaccine availability, and a reduction or cessation of other public health programs may be necessary in order to provide supplemental personnel for specific immunization job actions.
- 6. South Carolina's health care workers, emergency response workers, medical examiners, funeral directors, and morticians will face a sudden and massive demand for services and a possible 40% attrition of essential personnel.
- 7. The projected peak transmission period for a pandemic influenza outbreak will be 6 to 8 weeks. At least two pandemic disease waves are likely. Following the pandemic, the new viral subtype is likely to continue circulating and to contribute to seasonal influenza.
- 8. Considering South Carolina's estimated 2007 population of 4,320,593 and based on a population attack rate of 15-40%, South Carolina could anticipate between 648,000 and 1.73 million cases of influenza during the peak transmission period. Illness rates will be highest among school-aged children (about 40%) and decline with age. Among working adults, an average of 20% will become ill during a community outbreak.

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- 9. On average, infected persons will transmit infection to approximately two other people.
- 10. Outpatient visits due to influenza are projected to reach almost 533,000 (range 320,000 750,000), which translate to over 25 extra patients per day during the peak transmission period for every primary care physician in South Carolina.

- 11. Of those who become ill with influenza, 50% will seek outpatient medical care. Depending on the severity of the pandemic, the numbers of persons seeking outpatient medical care in South Carolina could range from 319,500 to 852,000.
- 12. Hospitalizations due to influenza and influenza-related complications may reach 14,622 based on a clinical attack rate of 25%, using FluSurge 2.0 Model (range 7,200 16,800 persons with SC population estimate of 4,321,847) the elderly and those with chronic medical conditions could account for most of these admissions.
- 13. The number of hospital beds and the level of mortuary services available to manage the consequences of an influenza pandemic will be inadequate.
- 14. South Carolina may experience a range of deaths from 1,278 for a Pandemic Severity Level of 1 to over 25,560 deaths in a Severity Level of 5.
- 15. A pandemic influenza death is a natural manner of death.
- 16. Pandemic mortalities will be counted above the normal mortality rates.
- 17. The death care industry, comprised of public and private agencies, will not be able to process remains the traditional manner due to the increased number of cases.
- 18. PI related deaths will primarily fall in two major categories, attended and unattended. The process to identify remains from attended deaths will be relatively straightforward, however, unattended deaths, which require verification of identity, issuing a death certificate and notifying the next of kin, will be labor intensive.
- 19. There will be delays in the issuances of death certificates for both attended and unattended deaths. This delay will place substantial pressure on the Coroner to issue death certificates so that the next of kin can manage the decedent's estate.

## IV. Community Mitigation Measures and Strategies: Planning

#### **Description of Planning Activities:**

**The Pandemic Influenza Planning Group (PIPG)** was established to review and continually update South Carolina's Pandemic Influenza Response Plan, Annex 2 of the State Mass Casualty Plan. It is chaired by the DHEC Public Health Preparedness staff and includes the state

Pandemic Influenza Coordinator and representatives from the Health Services Office of Clinical Services, the Bureau of Disease Control, the Division of Acute Disease Epidemiology (DADE), the Immunization Division, DHEC Media Relations, Office of Public Health Preparedness, Office of Quality Management Training and Office of General Counsel. This group plans, coordinates, oversees, and reviews activities required by the CDC Pandemic Influenza Program and standard operating procedures developed for the Pandemic Influenza Plan.

Individual program areas responsible for particular activities under the Pandemic Influenza Plan report on and request review or approval of activities and projects. For example, the Planning Group oversaw and provided resources to the required statewide school closure tabletop exercise in February 2007, the organization of Vaccine Clinics and Vaccination Throughput Studies in 2006, 2007, and the development and exercising of internal isolation and quarantine procedures. Under the group's planning for communication of medical information, the Pandemic Influenza Community Outreach Planning Committee was formed in 2006 to oversee and coordinate training, outreach, education, and information activities conducted by DHEC staff. This Committee is comprised of staff from Communication Resources, Division of Acute Disease Epidemiology, Media Relations, Office of Minority Health, Office of Public Health Preparedness and Office of Quality Management Training.

In each of the eight SCDHEC regions, one or more persons was designated as the regional pandemic influenza outreach coordinator. These coordinators work with the public health preparedness directors in each region to ensure that pandemic planning is incorporated in the local emergency readiness planning. The coordinators are the liaison between public health, the hospitals, the faith community, local businesses, civic groups, local schools and other planning partners. The pandemic influenza outreach coordinators provide educational programs to their communities and provide technical assistance to their community partners in developing their pan flu plans.

Monthly public health preparedness meetings are held and hosted by the SCDHEC Health Services Deputyship area. These meetings are attended by both the regional public health preparedness directors and the pan flu outreach coordinators. Additionally, the Health Services Deputyship hosts a monthly conference call with the regional preparedness directors. It is at these meetings that policies and procedures, as well as risk communication messages, developed at the state level, are introduced to the regional (local) planners. These meetings serve as a forum to discuss pan flu planning issues and strategies at the local level. Pan flu planning templates, designed to ensure consistency with state and local plans, are distributed and discussed at these meetings. Technical assistance in developing plans from these templates are provided at the monthly public health preparedness meetings. Current messages and products developed by the state office are shared with the local public health preparedness directors at these meetings.

The DHEC Division of Acute Disease Epidemiology (DADE) is responsible for the development of policies and protocols for the surveillance and response to influenza/novel-strain and pandemic influenza. This includes monitoring of influenza-like illnesses (ILI) and the rapid identification of an outbreak of pandemic influenza. Surveillance and response policies and protocols are provided to the eight public health regions for use in surveillance and response

activities of their Outbreak Response Teams. This Division works closely with public and private healthcare providers and has established a continually growing network of ILI providers. This Division also coordinates with DHEC Office of General Counsel to establish criteria and procedures for the isolation and quarantine of suspected cases of a novel virus.

The Disease Control Subcommittee is coordinated by members of DADE (see Executive Summary). In concert with DADE, this subcommittee establishes the community mitigation measures to be undertaken.

Additionally, members of DADE and the Division of Women's and Children's Services, Safe Schools/Healthy Schools of DHEC are included on membership of the SC Department of Education Committee responsible for planning for a pandemic influenza. This Committee has developed a draft policy regarding school closure during a pandemic, and continues to further refine this policy. (See additional information under Community Mitigation-School Closures).

The DHEC Office of General Counsel (OGC) is responsible for advising DHEC, emergency response partners, and the public on pandemic influenza legal issues. The OGC has assigned a Staff Attorney to work exclusively on public health preparedness issues. This Staff Attorney sits on DHEC Pandemic Influenza Planning Group. The OGC drafted new Isolation and Quarantine Order Procedures to coordinate the issuance of isolation and quarantine orders between local DHEC disease surveillance staff and central office management. Between December 2007 and February 2008, the OGC is working with DADE, DHEC's regional office, and the Office of Quality Management to conduct isolation and quarantine drills to test these new procedures. As part of the pandemic influenza planning activities, the OGC conducted in 2007 the following educational seminars and presentations:

- "The Emergency Health Powers Act in an Influenza Pandemic: Social Workers and Legal Issues," Social Work Fall In-Service.
- "The Emergency Health Powers Act in an Influenza Pandemic: Nursing Homes and Legal Issues," South Carolina Health Care Association and the South Carolina Association of Non-Profit Homes for the Aging, Seminar, Pan Flu: It Can Happen.
- "The Emergency Health Powers Act in a Public Health Emergency: The EHPA and Pee Dee Infection Control Practitioners," Association of Infection Control Practitioners, Palmetto Chapter
- "The Emergency Health Powers Act in a Public Health Emergency: The EHPA and Local Responders," Presentation and discussion session with emergency management, hospitals, and law enforcement in Chesterfield, Clarendon, Darlington, Dillon, Florence, Kershaw, Lee, Marion, and Marlboro Counties.
- "SC Prepares Pandemic Influenza: Emergency Measures and You Disease Control and Public Health Authority" with DHEC DADE and Media Relations, Satellite Broadcast on SC Prepares Network.
- "Law Enforcement's Role Under the Emergency Health Powers Act," Interview for Legal Update, Satellite Broadcast by the South Carolina Criminal Justice Academy.
- "The Emergency Health Powers Act in a Public Health Emergency: The EHPA and Local Responders," Satellite Broadcast on South Carolina Educational Television.
- "The Emergency Health Powers Act in a Public Health Emergency: The EHPA and Local Responders," Presentations and discussion sessions with emergency management, hospitals,

and law enforcement in Abbeville, Anderson, Beaufort, Cherokee, Colleton, Edgefield, Georgetown, Greenville, Greenwood, Hampton, Horry, Jasper, Laurens, McCormick, Pickens, Saluda, Spartanburg, and Union Counties.

The DHEC Division of Media Relations, working with DHEC DADE, is responsible for the planning and development of messages to communicate and educate the general public about preventing and dealing with a pandemic influenza. Topics that have been addressed range from infection control measures, to social distancing, to accessing available medical care, and providing home sick care. Working with members of the Pandemic Influenza Community Outreach Planning Committee, Media Relations spearheaded or contributed to many communication initiative sin 2006 and 2007. These include:

- Participation in and development of materials on pandemic influenza "Train the Trainer" sessions held at the state level to prepare approximately 300 speakers to provide pandemic influenza presentations in the eight public health regions. Educational programs were presented across the state, and to date over 28,000 participants have received messages about pandemic awareness, continuity of operations planning and the use of personal protective equipment.
- In 2006, coordination of a Speaker's Bureau to facilitate requests from community groups for medical and public health experts to provide basic education on the possibility of pandemic influenza and to encourage community awareness and planning among community, faith-based, healthcare, education and business leaders.
- Through a contract with the SC Home Care Association, a workshop was conducted to provide historical and clinical information and planning assumptions information on pandemic influenza to public and private home health care provider personnel, hospice workers, and social workers.
- The development of numerous televised and recorded programs under contract with SC Educational Television programs, including multiple broadcasts of: "Pan Flu: Prepare, Prevent, Plan Now", a 30-minute television documentary: a "Home Sick Care" educational DVD; a "Wash Hands" original song DVD; a closed-circuit presentation of "Pandemic Influenza's Impact on Schools"; a broadcast on the "Emergency Health Powers Act" for municipal officials, law enforcement and first responders and pandemic influenza education on several statewide radio programs.
- SC Prepares Broadcast series on seven pandemic influenza topics in 2007, produced through DHEC Communication Resources and DHEC distance learning coordinator, satellite presentations were accessible in over 200 sites across the state and subsequently available on DVD. Topics covered pandemic influenza awareness and planning, avian influenza, social distancing and school closures, emergency measures during a pandemic, pandemic surveillance, isolation and quarantine, psychosocial aspects of a pandemic, community hardiness, and home sick care during a pandemic.
- DHEC website and South Carolina Educational Television website with copies of the state pandemic influenza plan and planning

- resources:(www.scdhec.net/resources.htm and http://myetv.org/education/etvkids/grownups)
- The development of a folding "Pandemic Influenza Pocket Guide" for distribution to community groups in all outreach sectors. 50,000 copies in English and 10,000 copies in Spanish were distributed through state and regional outreach networks in a matter of months.
- The development of new, improved posters, fact sheets or brochures on: "Cover Your Cough", "Home Sick Care", and "What do You Do To Prevent the Flu?", distributed through state and regional outreach networks.
- The production and airing of a series of four public service announcements on "What Do You Do To Prevent The Flu?" and, to be aired in March 2008, a series of three public service announcements on pandemic influenza
- The facilitation of the establishment of a statewide information/referral assistance line in partnership with the United Way Association of South Carolina. During a pandemic, the United Way's 2-1-1 information line would be activated by DHEC to provide a statewide call-in number for the public with message maps provided to 2-1-1 operators.

The Pandemic Influenza Outreach Planning Committee assists the Division of Media Relations in providing input on the pandemic educational messages and products being produced. Depending on the project, other committee members may take the lead in coordinating a project, but always rely on Media Relations to provide staff support in writing, on-air hosting, moderating, and training. This committee convenes quarterly conference calls/meetings with regional DHEC pandemic influenza outreach coordinators and public health preparedness directors. The calls serve as a means to give updates on the latest product availability, to coordinate product distribution, to share "best practices" among regions, and to receive local input regarding the message and publication needs of the local communities.

The Training Advisory Subcommittee (see Executive Summary) includes members of targeted communities such as responder organizations, schools and colleges, businesses, governmental agencies, faith-based organizations and nonprofit associations. This subcommittee assists communities in identifying educational materials and training opportunities to enable them to better prepare their constituencies for a pandemic. TASC also received feedback from these organizations regarding their needs for educational materials.

**Division of Emergency Medical Services (EMS) and Trauma** is the division of DHEC that licenses and certifies EMS providers and technicians. This Division also approves statewide medical protocols for use by state providers. The EMS Advisory Council has formed a Pandemic Influenza Subcommittee to review and adopt pandemic protocols and provide guidelines for continuity of operations planning to the state's licensed EMS providers. To date, no pandemic specific treatment protocols have been adopted by the Division of EMS and Trauma. Current recommendations are to use existing respiratory protection protocols, until a pandemic specific protocol can be approved. The Committee is researching protocols from other states.

## Description of Community Mitigation Measures based on Phases and Pandemic Severity Levels:

Community-based mitigation measures are nonpharmaceutical disease interventions designed to interrupt the transmission of disease from person to person. DHEC will use two types of community-based containment measures to help mitigate the spread of pandemic influenza. Social distancing measures will focus on separating people from one another to prevent transmission. Infection control measures focus on preventing person-to-person transmission if people are in close contact long enough to spread influenza.

Implementation of social distancing measures will be based on surveillance data and feasibility, as well as concern regarding not implementing measures that may be more disruptive to societal operations than pandemic influenza they are attempting to control. DHEC will recommend infection control measures throughout a pandemic in South Carolina.

DHEC's plan for community-based containment of pandemic influenza envisions an early, targeted, and layered implementation of social distancing and infection control measures. Community mitigation begins with the education of the public and response partners so that when DHEC implements mitigation measures, the community has a knowledge base upon which to understand the importance of compliance. Through the Speaker's Bureau and extensive work with ETV, DHEC's Office of Media Relations has been active in area of community outreach. DHEC Office on General Counsel has provided numerous education seminars and presentations about the laws that will impact the State's pandemic influenza response.

Early planning and activities also include the construction of public messages and delivery systems, such as hotlines, that can be rolled out when DHEC begins to respond to a possible outbreak. The Office of Media Relations has also been activity in this area of planning. South Carolina's 2-1-1 system began to come live in late 2006. (See description of 2-1-1 system in Section VIII, Community Mitigation Communications.) Delivery of information can also be targeted to the subject of community mitigation measures. To this end, DADE, the OGC, and the Office of Social Work have been working to create pamphlets covering home sick care and psychosocial coping tips that will accompany DHEC isolation and quarantine orders. As part of the isolation and quarantine drills currently underway, DHEC Central Office's are also working with the public health regional offices to provide 24 hour contact numbers so that the recipients of such orders can contact DHEC with questions and concerns.

As for the mitigation measures, DHEC has planned for early, targeted, and layered strategies as an influenza pandemic moves through the State. The initial response will be triggered through South Carolina's robust disease reporting requirements and influenza surveillance network DADE recently added suspected strains of novel influenza A to the list of reportable conditions that is sent to all health care providers in South Carolina. Once a suspect case has been identified, DHEC has new pandemic influenza procedures for issuing voluntary and mandatory isolation and quarantine orders against symptomatic and exposed individuals. Traditional epidemiological investigations and contact tracing will be used to identify the cases early in the developing pandemic, when both staff resources are available and the potential for mitigation (i.e. "delay and potentially decrease" the impact of the pandemic) is most likely. If the outbreak

results in sustained human-to-human transmission, these early individual level containment measures will give way to community-based measures to increase social distance, including possible cancellation of large public gatherings and closure of schools. To achieve the greatest disease control affect, implementations of the individual and community-based measures will overlap during the early stages of the pandemic waves.

The following sections will outline the details of social distancing and infections control measures, including the triggers for when particular measures may be implemented.

#### **Definition of Community Mitigation Measures:**

**Isolation** means the separation and confinement of individuals known or suspected (via signs, symptoms, or laboratory criteria) to be infected with a contagious disease to prevent them from transmitting disease to others.

**Quarantine** means compulsory physical separation, including restriction of movement, of populations or groups of healthy people who have been potentially exposed to a contagious disease, or to efforts to segregate these persons within specified geographic areas. Individuals may be quarantined at home or in designated facilities; healthcare providers and other response workers may be subject to quarantine when they are off duty.

**Quarantine of close contacts** refers to the quarantine of individuals exposed to patients with communicable diseases (e.g., family members, work or school mates, healthcare workers).

Quarantine of groups of exposed persons refers to quarantine of people who have been exposed to the same source of illness (e.g., a case of influenza at a public gathering, on an airline, train, or cruise ship, at a school or workplace or apartment complex, or at a recently visited store or office).

**Snow days** are days on which offices, schools, transportation systems are closed or cancelled, as if there were a major snowstorm.

**Influenza clinics** are special facilities that may be established during a pandemic to provide rapid medical assessment of potentially infected persons. Ill persons would be encouraged to call influenza hotlines that provide advice on whether to stay home or seek help at an influenza clinic. Persons who come to an influenza clinic will be advised on whether they may be best served by hospital care or home care.

**Individual-level containment measures** include isolation and quarantine of persons and management of their close contacts.

Focused measures to increase social distance (or decrease social contact) includes measures applied to groups rather than individuals or whole communities (e.g., quarantine of groups of exposed persons and measures that apply to the use of specific sites or buildings).

Containment measures that apply to use of specific sites or buildings include cancellation of public events (e.g., concerts, sports events, movies and plays), closure of office buildings, apartment complexes, or schools; and closure of subways or bus lines. These measures may also involve restricting entrance to buildings or other sites (e.g., requiring fever screening or use of face masks before entry to schools, worksites, or airplanes).

Community-based measures to increase social distance include measures applied to whole neighborhoods, towns, or cities (e.g., snow days, establishment of fever clinics, and travel restrictions).

Table 1: Examples of Social Distancing and Containment Measures and Triggers For Pandemic Severity Levels 1, 2, and 3

Measure	Pandemic Severity Index 1	Pandemic Severity Index 2 and 3	Trigger/ Recommendations
Isolation of symptomatic confirmed or high risk case	Recommend	Recommend, if numbers are small, until resources exceeded	Based on financial and staffing issues
Closure of schools to slow spread of infection	Generally Not Recommended	Consider for less than or equal to four (4) weeks	Trigger: -two-fold increase in ILI reports -similar increase in syndromic surveillance for febrile respiratory illness -absenteeism -insufficient staff
			due to illness to ensure safety of children
Respiratory hygiene/cough etiquette	Yes	Yes	
Face coverage or surgical/procedure masks for confirmed cases	Yes	Yes	Use in appropriate settings such as home when around others
Face coverage or surgical/procedure masks for asymptomatic closely exposed persons (to a confirmed case or a high risk suspect)	Consider	Consider	Surgical masks should be used in HC settings
Face coverage or surgical/procedure mask for asymptomatic unexposed persons	No	No	
Recommend avoiding close contact with ill persons	Yes	Yes	
Tracing and follow-up of contacts of confirmed cases	Yes	Yes/No depending on resources	Based on number of contacts under surveillance and ability to rapidly trace contacts
Tracing and follow-up of contacts of high risk suspect case	Yes	Yes/No depending on resources	Criteria for stopping contact tracing after early phase needs to be developed

Measure Pandemic Severity Index 1		Pandemic Severity Index 2 and 3	Trigger/ Recommendations
Tracing and follow-up of contacts of low risk suspect case	No	No	
Voluntary quarantine of healthy close contacts of a confirmed case or high risk suspect	Yes	Possibly, very early	
Isolation of symptomatic close contacts of a confirmed case	Yes	Yes	
Isolation of symptomatic close contacts of a pending low risk case	Yes/No depending on the situation	No	
Isolation of symptomatic close contacts of a pending high risk case	Yes	Yes	
Recommend antivirals for contacts	Yes	Yes	Dependent on availability
Restrict travel	No	Based on CDC recommendations	Suspect cases should not travel – all phases; refer to CDC
Recommend deferring unnecessary travel to affected areas	No/Consider	Consider	
Entry screening			Based on CDC recommendations
Infection control	Droplet/standard Consider airborne infection isolation and respiratory protection in health care settings	Droplet/standard	
Promote respiratory hygiene/cough etiquette	Yes	Yes	
Cancel non-essential large public gatherings	Generally Not Recommended	Consider	Based on epi of cases could include-# of confirmed cases/100,000 pop within city
Recommend "snow days"	Generally Not Recommended	Consider	Telecommuting, teleconferencing Based on epi of cases could include

Measure	Pandemic Severity Index 1	Pandemic Severity Index 2 and 3	Trigger/ Recommendations
			# of confirmed cases/100,000 pop within city/region/etc.
Establish influenza hotlines or automated information lines	Yes	Yes	Cases identified within US -Staffing a hotline for 8-12 weeks would be difficult

**Table 2: Social Distancing and Containment Measures and Triggers** 

## Pandemic Severity Index 4 and 5

Measure	Recommendations	Implemented during	Trigger	Cessation of Measure
Isolation of symptomatic confirmed or high risk case	If possible (encourage case to self isolate). If self- isolation not possible and early in pandemic issuance of a Public Health Ordered Isolation	WHO Phase 6/ USG Stage 4/ SC Stage 5a (first case in SC)	Epi reports from hospital/healthcare	1. Increase WHO/USG Stage makes further isolation impractical for disease control 2. Limited staffing for identification and/or monitoring of isolation
Closure of schools to slow spread of infection (See also table "Use of Child Social Distancing Interventions by Pandemic Severity")	Recommended for less than or equal to twelve (12) weeks  (must consider benefit of closing schools in terms of congregate exposure versus interaction if children out of school associate with children they would not associate with in school)	WHO Phase 6/ USG Stage 5/ SC Stage 5b (localized clusters in SC)	Trigger: Localized clusters of cases in SC  Additional possible triggers: -absenteeism -insufficient staff due to illness to ensure safety of children	Confirmed end of pandemic or identification that this community mitigation measure is not effective for limiting disease transmission.
Respiratory hygiene/cough etiquette	Yes	WHO Phase 3/USG Stage 1/	Seasonal flu outbreaks	n/a
Face coverage or surgical/procedure	Use in appropriate settings such as	WHO Phase 6/USG Stage	Confirmed human outbreak in SC;	Confirmed end of

Measure	Recommendations	Implemented during	Trigger	Cessation of Measure
masks for confirmed cases	home when around others	5/SC Phase 5a (first case in SC)	suspect case	pandemic or exhaustion of resources necessitating additional recommendations for alternate barrier protection
Face coverage or surgical/procedure masks for asymptomatic closely exposed persons (to a confirmed case or a high risk suspect)	Consider/ Surgical masks should be used in HC settings	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	Confirmed human outbreak in SC; suspect case	Confirmed end of pandemic or exhaustion of resources necessitating additional recommendations for alternate barrier protection
Face coverage or surgical/procedure mask for asymptomatic unexposed persons	Consider in some settings (i.e., when in large gatherings where close contact is anticipated)	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	Confirmed human outbreak in SC	Confirmed end of pandemic or exhaustion of resources necessitating additional recommendations for alternate barrier protection
Recommend avoiding close contact with ill persons	Yes	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	Confirmed human outbreak in SC	Confirmed end of pandemic
Tracing and follow-up of contacts of confirmed cases	No (but in certain high risk settings may consider); Based on number of contacts under surveillance and ability to rapidly trace contacts	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	First confirmed case of novel virus in state	Confirmed end of pandemic or lack of resources to continue patient tracking and follow-up of contacts
Tracing and follow-up of contacts of high risk suspect case	Yes, for first several suspected human case identified in South Carolina where epidemiologic evidence (i.e. travel Hx) suggests strong probability of case confirmation.	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	First several suspected human identified in South Carolina	Confirmed end of pandemic or lack of resources to continue follow-up of contacts to suspect cases in lieu follow-up of contacts to confirmed cases

Measure	Recommendations	Implemented during	Trigger	Cessation of Measure
Voluntary quarantine of healthy close contacts of a confirmed case or high risk suspect	Possibly	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	First confirmed case of novel virus in state	Confirmed end of pandemic
Voluntary isolation of symptomatic close contacts of a confirmed case	Yes	WHO Phase 6/USG Stage 5/SC Phase 5a (first case in SC)	First confirmed case of novel virus in state	Confirmed end of pandemic
Restrict travel	Based on CDC recommendations/ Suspect cases should not travel – all phases; refer to CDC	WHO Phase 6	First confirmed case of pandemic worldwide or Recommendations made buy the WHO and/or the CDC	Confirmed end of pandemic or recommendations made by the WHO and/or the CDC.
Recommend deferring unnecessary travel to affected areas	Yes	WHO Phase 6	First confirmed case of pandemic worldwide	Confirmed end of pandemic
Infection control	Yes; Droplet/standard	WHO Phase 6/USG Stage 4	First human case in North America	Confirmed end of pandemic
Promote respiratory hygiene/cough etiquette	Yes: Surgical masks for confirmed cases or high risk suspect cases; Consider surgical masks or N95 respirator for asymptomatic closely exposed persons to a confirmed case or a high risk suspect, including homebased caregivers; Consider surgical mask or N95 respirator, depending on availability, mask for asymptomatic unexposed persons in settings involving close contact	WHO Phase 3	Bolster efforts intensified with first human case in North America	Confirmed end of pandemic
Cancel non-essential large public	Recommend	WHO Phase	Based on epidemiologic	

Measure	Recommendations	Implemented during	Trigger	Cessation of Measure
gatherings		6/USG Stage 5/SC Phase 5c (widespread cases in SC)	evidence (i.e. classification may include # of confirmed cases/100,000 pop within city/jurisdiction)	Confirmed end of pandemic or identification that this community mitigation measure is not effective for limiting disease transmission.
Recommend "snow days"	Recommend	WHO Phase 6/USG Stage 5/SC Phase 5c (widespread cases in SC	Telecommuting, teleconferencing Based on epi of cases could include # of confirmed cases/100,000 pop within city/region/etc.	Confirmed end of pandemic or identification that this community mitigation measure is not effective for limiting disease transmission.
Establish influenza hotlines or automated information lines (2-1- 1)	Yes	WHO Phase 6/USG Stage 4	Cases identified within US	Confirmed end of pandemic

#### V. Isolation and Quarantine

#### **Description of Planning Activities:**

DHEC Division of Acute Disease Epidemiology (DADE) and the DHEC Office of General Counsel are responsible for development of the process to identify cases of novel influenza and implement procedures for isolation/quarantine.

DADE has implemented educational programs for healthcare providers and systems regarding the notification process that includes Health Alert Network (HAN) advisories, updates and alerts to all medical offices and hospitals concerning public health matters, including notification of the identification of a novel influenza virus. Until January 2008, the HAN system was composed only of a rapid dialogic fax system. The notification is now made through the HAN/REACHSC web portal.

In the case of a suspected novel virus, alerts to all healthcare providers would be provided via the Health Alert Network advisories, updates and alerts by means of the HAN/Reach SC portal. This web portal usage was launched effective January 2008 and will provide a more direct, effective means of rapid information distribution than blast faxes.

At the core of the process is an educational system in which regional epidemiology nursing staff and public health clinical liaisons, meet individually with local health care providers and their staff to recruit participation in the ILI surveillance network and influenza culture testing through the state Bureau of Labs and to provide education on the process to notify DHEC of suspected novel influenza cases.

The public health clinical liaisons provide training and information sessions in medical practices regarding the need for pandemic influenza preparedness for infection control, surge capacity, COOP planning and pandemic messages for their patients. The public health clinical liaison training module includes a section on infection control and triage. It is recognized that one of the surge issues for health care providers, even private medical practices, will be the need for the triaging of patients. Part of the education and training provided by the PHCLs is a plan for medical practices to triage patients to determine the best disposition for appropriate care.

The system currently in place for influenza monitoring includes a volunteer influenza monitoring network and an influenza-like illness network. The voluntary influenza monitoring network consists of two components: 1) submission of specimens for viral culture and isolation and 2) monitoring and reporting of influenza-like illness (ILI). These voluntary networks provide information on influenza virus strain and subtype and influenza disease burden. Providers are encouraged to enroll in one of both voluntary monitoring systems. Providers wishing to enroll complete a provided form or contact DADE.

The influenza-like illness network monitors the number of patients presenting with influenza-like symptoms in the absence of another known cause. ILI is defined as fever (temperature of  $> 100^{\circ}\text{F}$ ) plus either a cough and/or a sore throat in the absence of another known cause. Providers submit weekly reports to the CDC of the total number of patients seen each week stratified by age group. (Seasonal Influenza Surveillance,

www.scdhec.gov/health/disease/han/docs/DHA-Flu%202007-08.pdf)

The strategy for preparedness for a pandemic is to first educate and recruit healthcare providers to participate in the ILI surveillance network, using the same reporting procedures that would be established in the case of a novel virus.

As mentioned in Section IV, the OGC conducted multiple legal training sessions throughout the State during 2007. The training session focused on South Carolina's Emergency Health Power Act and DHEC isolation and quarantine authorities would be implemented during an influenza pandemic. Special emphasis was put on defining isolation and quarantine, describing the different types of orders that would issue, and how such community mitigation strategies would affect hospitals and other local response partners. While the local isolation and quarantine training sessions were being conducted, the OGC was working with DADE to develop new pandemic influenza procedures for issuing isolation and quarantine orders. These procedures were approved by DHEC management in November 2007, and a series of eight drills to exercise the new procedures in each DHEC public health region were begun in December 2007. Following the conclusion of the drills in February 2008, the OGC will be coordinate a series of meetings with hospitals and other local responders to discuss more details about isolation and quarantine, specifically focusing on DHEC's new procedures and how they will impact local communities. The 2007 training sessions were intended to lay the groundwork for this second set of isolation and quarantine training sessions. On January 22, 2008, the OGC met with the South Carolina Hospital Association to begin planning these sessions.

The DHEC Office of Public Health Social Work (OPHSW) is responsible for the planning, development, and administration of social work services within the public health system. The OPHSW in addition to assuring that emergency preparedness information be provided to all the agencies social work staff, planned and coordinated statewide training for additional public health and medical personnel, first responder groups and external behavioral health professionals about the potential psychosocial and behavioral health consequences of a pandemic. This training included specific discussion about behavioral issues related to isolation and quarantine.

In addition the OPHSW has worked with the SC Department of Mental Health and other organizations and agencies to form local behavioral health teams in areas across the state. These teams could be mobilized to provide psychological support to victims and/or responders when a pandemic occurs.

#### **Identification of Novel Virus/Implementation of Isolation:**

DHEC had developed isolation and quarantine order issuance procedures and orders for the initial cases and clusters of avian or novel influenza A. The procedures include epidemiologic investigation of both suspected cases and close contacts. These procedures collaborate with DHEC legal counsel, epidemiology outbreak response teams and local law enforcement for assurance for compliance with such orders.

DHEC informs healthcare providers through HAN/Reach SC of the latest clinical criteria for diagnosis of potential avian and novel influenza A human cases. DHEC has and continues to utilize the latest CDC and WHO guidance for both clinical and epidemiologic criteria of potential avian or novel influenza A human cases.

## Current Proposed CDC/Influenza Division Case definitions for H5N1

#### Confirmed Case

Clinical Criteria

Documented temperature  $\geq$ 38 C ( $\geq$ 100.4 F) and one of the following:

• cough, sore throat, and/or respiratory distress

#### And

### Epidemiologic Criteria

One of the following exposures within 10 days of onset:

- Direct exposure to sick or dead domestic poultry
- Direct exposure to surfaces contaminated with poultry feces
- Consumption of raw or partially cooked poultry or poultry products.
- Close contact (within 3 feet) of an ill patient with confirmed or suspected avian influenza A (H5N1) infection.
- Works with live HPAI (H5N1) virus in a laboratory.

#### And

#### Laboratory criteria

Positive for avian influenza A (H5N1) virus by one of the following methods:

- Positive RT-PCR for H5N1
- Isolation of H5N1 from viral culture
- 4 fold rise in H5N1 specific antibody titer by microneutralization assay in paired sera
- Positive IFA for H5 antigen using H5N1 monoclonal antibodies

#### **Suspect Case**

#### Clinical criteria:

Documented temperature  $\geq$ 38 C ( $\geq$ 100.4 F) and one of the following:

• cough, sore throat, and/or respiratory distress AND

#### Epidemiologic criteria:

One of the following exposures within 10 days of onset:

- Direct exposure to sick or dead domestic poultry
- Direct exposure to surfaces contaminated with poultry feces
- Consumption of raw or partially cooked poultry or poultry products
- Close contact (within 3 feet) of an ill patient with confirmed or suspected avian influenza A (H5N1) virus infection
- Works with live HPAI (H5N1) virus in a laboratory

#### Laboratory critieria:

Laboratory test for avian influenza A (H5N1) is pending, inadequate or unavailable

Implementation of the process to issue isolation and quarantine orders includes the conducting of telephone exercises in all public health regions of rapid public health containment and mitigation responses to reports of suspected avian or novel influenza A patients from healthcare providers (conducted December through February 2008).

Based on information provided by DHEC, or a suspect case of novel Influenza A virus identified by a local healthcare provider, the healthcare provider will notify DADE via telephone to trigger an epi investigation and submission of sample to the DHEC Bureau of Laboratories will be made simultaneously. (Positive identification of the virus will be made by six hours following submission of the sample.) Following consultations with appropriate DHEC officials (see Pandemic Influenza Standard Operating Procedures (SOPs) – I. Pandemic Influenza Disease Surveillance), a determination will be made regarding isolation prior to definitive lab results.

These DHEC procedures allow for prompt epidemiologic investigation and isolation of cases either in medical facilities or at home, as medically appropriate. The status of hospitalized cases will be monitored via telephone or fax by DHEC public health outbreak teams. The status of home isolated cases will also be monitored via telephone interview by public health outbreak response teams.

During phases 4 and 5, isolation and quarantine will be used to help identify and confirm cases and slow the initial spread of the disease. Suspect cases will be isolated at hospitals on a temporary basis while specimens are collected and sent to the DHEC Bureau of Laboratories for testing. Isolation of suspect and confirmed cases will be mandatory. Meanwhile, an epidemiological investigation will identify close contacts for possible quarantine. DHEC will initially pursue consent quarantines, but will issue mandatory orders if necessary. DHEC will quarantine close contacts at home if at all possible. As required by South Carolina law, DHEC will monitor the health of individuals under quarantine and assure isolation if the individuals become symptomatic.

#### **Isolation**

The purpose of isolation is to reduce influenza transmission by separating ill and infected persons from others, providing medical care to the sick person, and protection those in close contact with PPE. Isolation will be implemented on an as needed basis, with consultation among state and local public health officials. Isolation will generally happen in hospitals and other health care facilities.

The process of isolating suspect cases will probably begin with a disease report call from a hospital or other health care facility. DHEC has a 24-hour disease reporting system in place that is staffed by Disease Surveillance Response Coordinators (DSRC). DHEC has created a new "Novel Virus / Pandemic Influenza Isolation and Quarantine Information Form" that the DSRCs will use to collect information about the suspect case. After gathering the information, the DSRC will contact the Regional Health Director, the Regional Medical Director, and other regional managers and discuss the situation. The Regional Health Director is then required to consult DADE.

The sharing of information regarding ill persons between employers, hospitals, clinical facilities and health departments is governed by DHEC's Health Records Policy Manual. This Manual has plans and procedures for sharing information about individuals under isolation and treatment. When responding to requests to share information, DHEC will also have to consider applicable state and federal privacy laws.

#### Quarantine

#### Quarantine of groups of exposed persons:

The purpose of quarantine is to reduce influenza transmission by separating exposed persons from others, monitoring exposed persons for symptoms, and providing medical care and infection control precautions as soon as symptoms are detected. Quarantine will be implemented on an as needed basis, with consultation among state and local public health officials (Pandemic Influenza Standard Operating Procedures (SOPs) – VIII. Community Disease Control and Prevention).

Groups that might be quarantined include persons who might have been exposed to confirmed or suspected pandemic-strain influenza case via:

- Family members,
- At a public gathering,
- On an airplane or cruise ship or other mode of transportation,
- At their school or workplace,
- Healthcare providers who work at a facility where influenza cases receive care

Group quarantine (like patient isolation) is optimally performed on a voluntary basis, in accordance with instructions of healthcare providers and health officials. Basic legal authority to compel mandatory isolation and quarantine of individuals and groups when necessary to protect the public's health is provided under law and regulation:

- DHEC Home or Hospital Isolation PHO SC Code §§ 44-4-110, -140 44-4-130(N), -510, -530, -540,
- DHEC Home or Hospital Quarantine PHO SC Code §§ 44-4-110, -140, 44-4-130(N), -510, -530, -540,
- DHEC Geographic or Facility Quarantine PHO,
- SC Code §§ 44-4-110, -140 -300, -530.

#### RECOMMENDATIONS FOR QUARANTINE

## General considerations and actions during quarantine

- Monitor each quarantined person daily, or more frequently if feasible, for fever, respiratory symptoms, and other symptoms of early influenza disease.
- Monitor compliance with quarantine through daily visits or telephone calls.
- Provide a hotline number for quarantined persons to call if they develop symptoms or have other immediate needs.
- If a quarantined person develops symptoms suggestive of influenza, arrangements should be in place for separating that person from others in quarantine and ensuring immediate medical evaluation.
- Provide persons in quarantine with all needed support services, including 1) psychological support, 2) food and water, 3) household and medical supplies, and 4) care for family members who are not in quarantine. Financial issues, such as medical leave, may also need to be considered.
- Collect data related to quarantine activities to guide ongoing decision-making including information on each person quarantined:
  - Relationship to the case-patient
  - Nature and time of exposure
  - Whether the contact was vaccinated or on antiviral prophylaxis or using PPE
  - Underlying medical conditions
  - Number of days in quarantine
  - Symptom log
  - Basic demographics
  - Compliance with quarantine

Based on current available data, the recommended duration of quarantine for influenza is generally 10 days from the time of exposure. (This period may be adjusted based on available information during a pandemic.) At the end of the designated quarantine period, contacts should have a final assessment for fever and respiratory symptoms. Persons without fever or respiratory symptoms may return to normal activities.

#### Home quarantine

Whenever possible, contacts should be quarantined at home. Home quarantine requires the fewest additional resources, although arrangements must still be made for monitoring patients, reporting symptoms, transporting patients for medical evaluation if necessary, and providing essential supplies and services. Home quarantine is most suitable for contacts with a home environment that can meet their basic needs and in which unexposed household members can be protected from exposure. Other considerations include:

- Persons in home quarantine must be able to monitor their own symptoms (or have them monitored by a caregiver).
- The person's home should be evaluated for suitability before being used for quarantine, using a questionnaire administered to the quarantined person or the caregiver.
- Quarantined persons should minimize interactions with other household members to prevent exposure during the interval between the development and recognition of

- symptoms. Precautions may include 1) sleeping and eating in a separate room, 2) using a separate bathroom, and 3) appropriate use of personal protective equipment.
- Persons in quarantine may be assessed for symptoms by either active or passive monitoring. Active monitoring of contacts in quarantine may overcome delays resulting from the slow onset of symptoms or denial among those in quarantine.
- Household members may go to school, work, etc., without restrictions unless the quarantined person develops symptoms. If the quarantined person develops symptoms, household members should remain at home in a room separate from the symptomatic person and await additional instructions from health authorities.
- Household members can provide valuable support to quarantined persons by helping them feel less isolated and ensuring that essential needs are met.
- Immediate and ongoing psychological support services should be provided to minimize psychological distress.
- Quarantined persons should be able to maintain regular communication with their loved ones and healthcare providers.

#### Quarantine in designated facilities

In some cases, affected persons may not have access to an appropriate home environment for quarantine. Examples include travelers; persons living in dormitories, homeless shelters, or other group facilities; and persons whose homes do not meet the minimum requirements for quarantine. In other instances, contacts may have an appropriate home environment but may not wish to put family members at risk. In these situations, health officials should identify an appropriate community-based quarantine facility. Monitoring of quarantined persons may be either passive or active, although active monitoring may be more appropriate in a facility setting. Facilities designated for quarantine of persons who cannot or choose not to be quarantined at home should meet the same criteria listed for home quarantine. Evaluation of potential sites for facility-based quarantine is an important part of preparedness planning.

#### **Working quarantine**

This type of quarantine applies to healthcare workers or other essential personnel who are at occupational risk of influenza infection. These groups may be subject to quarantine either at home or in a designated facility during off-duty hours. When off duty, contacts on working quarantine should be managed in the same way as persons in quarantine at home or in a designated facility. Local officials should:

- Monitor persons in working quarantine for symptoms during work shifts
- Promptly evaluate anyone who develops symptoms
- Provide transportation to and from work, if needed
- Develop mechanisms for immediate and ongoing psychological support

At the end of the designated quarantine period, contacts should receive physical (fever and respiratory symptoms) and psychological health assessments. Persons without fever or respiratory symptoms may return to normal activities. Persons who exhibit psychological distress should be referred to mental health professionals for additional support services.

#### **Care of Persons in Quarantine**

The South Carolina Emergency Health Powers Act (Section 44-4-100) requires that DHEC care appropriately for citizens who have been isolated or quarantined:

"Section 44-4-530. (A) During a public health emergency, DHEC may isolate or quarantine an individual or groups of individuals. This includes individuals or groups who have not been vaccinated, treated, tested, or examined pursuant to Sections 44-4-510 and 44-4-520. DHEC may also establish and maintain places of isolation and quarantine, and set rules and make orders.

(B) DHEC must adhere to the following conditions and principles when isolating or quarantining individuals or groups of individuals:

....(6)the needs of persons isolated and quarantined must be addressed in a systematic and competent fashion including, but not limited to, providing adequate food, clothing, shelter, means of communication with those in isolation or quarantine and outside these settings, medication, and competent medical care;

(7)premises used for isolation and quarantine must be maintained in a safe and hygienic manner and be designed to minimize the likelihood of further transmission of infection or other harms to persons isolated or quarantined; and

(8)to the extent possible, cultural and religious beliefs must be considered in addressing the needs of the individuals and establishing and maintaining isolation and quarantine premises."

To do this, DHEC will rely on standard emergency operating procedures and mutual aid as provided in the South Carolina Emergency Operations Plan. The Emergency Support Function (ESF) concept tasks state and federal agencies to provide and/or coordinate certain resources in response to emergencies or disasters. ESF-6, Mass Care, is headed by the South Carolina Department of Social Services and supported by The American Red Cross, The Salvation Army, the SC Department of Health and Human Services, DHEC, Department of Probation, Parole, and Pardon Services and the Lieutenant Governor's Office on Aging. This ESF traditionally supports citizens in sheltering situations and mass provision of food. DHEC would call upon the assistance of representatives of this emergency support function to attend to the non-health related needs of persons in isolation and quarantine.

Persons in quarantine (as well as persons in isolation) receive printed materials "Pandemic Stress Tips" and "Home Care Brochure." (See Attachments 4 and 5). Additionally, a video on "Home Care During a Pandemic" is available for distribution. In addition to being provided with printed guidance on necessary psychological and physical care, persons in quarantine are provided with a hotline (2-1-1) to provide them information about when and where to seek medical and/or psychological attention.

## VI. Community Social Distancing

#### **Description of Planning Activities:**

Community mitigation education and planning activities are coordinated through several DHEC and stakeholder committees. The membership of the Training and Advisory Subcommittee consists of members of the business, faith, education and other non-profit public and private sectors. This committee develops and recommends strategies and training for the community on pandemic preparation.

The Pandemic Influenza Community Outreach Planning Committee, an internal DHEC planning group assists the Division of Media Relations in developing the ideas and products for education to the community regarding community mitigation. (See Section IV).

A DHEC Speakers Bureau and regional pandemic influenza outreach coordinators have conducted educational presentations throughout communities in South Carolina. It is intended that education regarding the highly contagious nature of a pandemic and the community mitigation measures that may be implemented to contain the disease are part of the pre-pandemic planning process to mitigate the disease. Education prior to a pandemic provides the public with knowledge already in place to assist in mitigation efforts.

A newly established Emergency Support Function within the State Emergency Operations Center for Businesses (ESF-24) will provide a direct link to statewide businesses in pandemic communication and support. ESF-24 provides input and support during a declared pandemic emergency.

See also Section VIII. Community Mitigation Communications.

#### **Community-based mitigation: measures and indications for use**

Implementation will be based on surveillance data and feasibility, as well as concern regarding not implementing measures that may be more disruptive to societal operations than pandemic influenza they are attempting to control.

#### Measures that apply to use of specific sites or buildings

Two ways of increasing social distance are to cancel events and close buildings or to restrict access to certain sites or buildings. These measures are sometimes called "focused measures to increase social distance." Depending on the situation, examples of cancellations and building closures might include:

- Cancellation of public events (concerts, sports events, movies, plays)
- Closure of recreational facilities (community swimming pools, youth clubs, gymnasiums)

#### Measures that affect communities

Measures that affect entire communities (including both exposed and non-exposed persons), include:

- Promotion of community-wide infection control measures (e.g., respiratory hygiene/cough etiquette)
- Snow days
- Closure of office buildings, shopping malls, schools, and public transportation

As community outbreaks of pandemic influenza occur, community-wide infection control measures may decrease the overall magnitude of the outbreak. Community-based measures may also include school closures, "snow days", etc. (i.e. social distancing measures).

#### **Community-wide infection control measures**

Throughout a pandemic, public health authorities will encourage all persons with signs and symptoms of a respiratory infection, regardless of presumed cause, to:

- Cover the nose/mouth when coughing or sneezing.
- Use tissues to contain respiratory secretions.
- Dispose of tissues in the nearest waste receptacle after use.
- Perform hand hygiene after contact with respiratory secretions and contaminated objects or materials.

Persons at high risk for complications of influenza will be advised to avoid public gatherings (e.g., movies, religious services, public meetings) when pandemic influenza is in the community. They should also avoid going to other public areas (e.g., food stores, pharmacies); the use of other persons for shopping or home delivery service is encouraged.

#### **Snow days**

Implementation of "snow days"—asking everyone to stay home—involves the entire community in a positive way, is acceptable to most people, and is relatively easy to implement. Snow days may be instituted for an initial 10-day period, with final decisions on duration based on an epidemiologic and social assessment of the situation. The public will be instructed in the acquisition and storage of necessary provisions including type and quantity of supplies needed during snow days. Snow days can effectively reduce transmission without explicit activity restrictions (i.e., quarantine). Consideration will be given to personnel who maintain primary functions in the community (e.g., law enforcement personnel, transportation workers, utility workers [electricity, water, gas, telephone, sanitation]). Compliance with snow days might be enhanced by "self-shielding" behavior (i.e., many people may stay home even in the absence of an official snow day ["reverse quarantine"]).

# School Closure (See also Section VI-Dismissal of Schools and Closure of Child Care Programs)

Although data are limited, school closures may be effective in decreasing spread of influenza and reducing the overall magnitude of disease in a community. In addition, the risk of infection and illness among children is likely to be decreased, which would be particularly important if the pandemic strain causes significant morbidity and mortality among children. Children are known to be efficient transmitters of seasonal influenza and other respiratory illnesses. Anecdotal reports suggest that community influenza outbreaks may be limited by closing schools. Results

of mathematical modeling also suggest a reduction of overall disease, especially when schools are closed early in the outbreak. During a Pandemic Period, parents should be encouraged to consider child care arrangements that do not result in large gatherings of children outside the school setting.

Since school closures may be effective in slowing down influenza transmission in the community, and certain school buildings must be adapted to other purposes, a plan for school closures for a two-week period of time at the exponential phase of influenza transmission. This containment plan is based on the premise that the most impact from school closure can be achieved during the exponential phase of the initial wave of pandemic influenza. This plan is certainly subject to change based on new models of transmission and empiric observations.

### Scaling back community containment measures

The decision to discontinue community-level measures must balance the need to lift individual movement restrictions against community health and safety. Premature removal of containment strategies can increase the risk of additional transmission. Decisions will be based on evidence of improving local/regional control, such as:

- Consistent decrease in the number of confirmed cases
- Reduction in the number of probable and known cases
- Effective protective countermeasures are in place (e.g., high coverage with a pandemic influenza vaccine)

### **Triggers for Implementation of Mitigation Strategy**

As outlined in Section II: Introduction of this narrative, South Carolina has identified pandemic stages to correlate with the WHO and USG Pandemic stages. The South Carolina identification of stages will provide the triggers for DHEC to activate the initiation of activities in specific pandemic influenza standard operating procedures. Identification of a suspected case will be communicated from the local (regional) public health region to the state DADE epidemiologist on-call.

### VI. Dismissal of School and Closure of Child Care Programs

### **Description of Planning Activities:**

The DHEC Division of Acute Epidemiology (DADE) and the South Carolina Department of Education (SCDE) Office of Youth Services Healthy Schools Program began meeting in 2006 to develop recommendations for school closure during a pandemic. South Carolina is a home rule state; the SCDE does not have legal authority over the local school districts to close schools. If a state of emergency is declared by the Governor, or the Emergency Health Powers Act is instituted or a public health emergency is declared by DHEC, then closure of the schools at a state level may be implemented.

In response to the need to develop guidelines for schools during a pandemic a School Closure Task Force was developed. Membership of this task force consists of four members from

DHEC, five school members, Governor's Office, SC Department of Social Services (child care), SC Department of Commerce, SC Department of Public Safety, and one media partner. This task force is responsible for addressing issues such as determining criteria for school closure and reopening, determining which jurisdiction(s)/schools will be closed, continuation of education and services during a pandemic school closure, and other guidelines governing the operation or closure of schools during a pandemic.

### **Definition of School Closure**

"School Closure" in pandemic planning is defined as dismissal of classes, as well as extracurricular and co-curricular activities. No in-service or workday activities are scheduled, nor are any other education-related activities scheduled which would be likely to put large numbers of persons into close contact. Local School Districts will determine how and whether facilities are to be used for any essential administrative activities mandated by their Continuity of Operations Plans (COOPs.) "School Closure" does not preclude the use of school facilities for other pandemic response activities including, but not limited to immunization or antiviral distribution clinics or their use by health care facilities as Alternate Care Sites.

### Philosophical Considerations for Closure and Opening of Schools

### **School Closure**

Although data are limited, school closures may be effective in decreasing spread of influenza and reducing the overall magnitude of disease in a community. In addition, the risk of infection and illness among children is likely to be decreased, which would be particularly important if the pandemic strain causes significant morbidity and mortality among children. Children are known to be efficient transmitters of seasonal influenza and other respiratory illnesses. Anecdotal reports suggest that community influenza outbreaks may be limited by closing schools. Results of mathematical modeling also suggest a reduction of overall disease, especially when schools are closed early in the outbreak. During a pandemic period, parents should be encouraged to consider childcare arrangements that do not result in large gatherings of children outside the school setting.

Since school closures may be effective in slowing down influenza transmission in the community, and certain school buildings must be adapted to other purposes, initial planning for school closures called for one or more two-week closure periods at the exponential phase of influenza transmission. This was based on the premise that the most impact from school closure can be achieved during the exponential phase of the initial wave of pandemic influenza. Most recently, however, planning has increased to four-week closures based on recommendations for containment measures for various Pandemic Severity Indices. However, a two-week closure may be used as a containment measure in a Category 1 Pandemic, even though current planning guidance states that closure in Category 1 is "generally not recommended."

### **Scaling Back Community Containment Measures**

The decision to discontinue community-level measures must balance the need to lift individual movement restrictions against community health and safety. Premature removal of containment strategies can increase the risk of additional transmission. Decisions will be based on evidence of improving local/regional control, such as:

- Consistent decrease in the number of confirmed cases
- Reduction in the number of probable and known cases
- Effective protective countermeasures are in place (e.g., high coverage with a pandemic influenza vaccine)

If schools were closed locally for protective sequestration, they may be re-opened by the local superintendent at any time. However, if a gubernatorial closure order is in place or a state of emergency has been declared, in practical, if not legal fact, school closure and re-opening decisions will be the purview of the governor.

### **Considerations for Closure of Out-of-Home Childcare Centers**

Financial hardship, rather than epidemiological criteria, may affect the timing and scope of closure of childcare. In a Category 1 Pandemic (often described as a normal, bad flu season), the loss of income for parents will be an important consideration, and may be separated from the school and college/university closure declarations.

Private and non-profit child care centers follow the lead of the district public schools when closing.

### Planning Assumptions for SC Pandemic School Closure

### **Epidemiological Criteria**

Current planning assumes that schools and public health will have access to and share data related to the community containment triggers identified in the table below:

- Two-fold increase in reports of Influenza-like illness (ILI)
- Similar increase in syndromic surveillance for febrile respiratory illness
- Excessive student absenteeism (no percentage has yet been identified baseline absenteeism rate is 2.5%)
- Insufficient faculty and staff present, due to illness or other causes, to assure safe operation of schools

If these, or any other closure criteria identified by the SC School Closure Task Force are identified, the State Epidemiologist will convene the School Closure Executive Committee to recommend to the Governor that all schools be closed, statewide. Current planning also assumes that this closure will include:

- All public, private and parochial schools serving students in grades Pre-K through 12
- Licensed out-of-home childcare centers
- Colleges and universities, unless all education can be accomplished without student congregation.

Current planning with the SC Department of Education demonstrates a preference for a statewide, gubernatorial order for school closure, rather than regionally based closure decisions. It also assumes statewide re-opening or schools.<sup>1</sup>

### **Protective Sequestration**

A second trigger for school closure may be the goal of protective sequestration, i.e., preventing the spread of illness at school based on forecasts of imminent spread of disease and based on epi of surrounding states or regions. This closure may be accomplished at the local school district level, by powers reserved to the local school district superintendent. It may also become a recommendation of the School Closure Task Force for a gubernatorial closure order.

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A discussion of the legal authorities for closure, and/or the declaration of states of emergency or invocation of the Emergency Health Powers Act is beyond the scope of this summary.

### Use of Child Social Distancing Interventions by Pandemic Severity

The table that follows depicts DHEC's implementation of child social distancing in the WHO, U.S., and South Carolina Pandemic Phases in accordance with the CDC Pandemic Severity Index. This table may change as CDC guidance changes, and as more is known about the effectiveness of non-pharmaceutical interventions and the epidemiology of a novel or pandemic influenza virus.

WHO Phase	U.S. Stage	SC Stage 5c Widesprest Respinsosta Garolina	No Rec. for Considers Recommend School closure school		
			PSI 1 <sup>2</sup>	PSYU2eand 3 <sup>3</sup> Weeks	4 SIV and 5 4
WHO Phase 6 Efficient and Sustained Human- to-Human Transmission	U.S. Stage 3 Widespread Human Outbreaks in Multiple Locations Overseas	SC Stage 3 Sustained Human-to-Human Transmission Overseas	Recommend Restrictions on school activities	Urge school activity Restrictions ≤4 weeks	Urge school activity Restrictions ≤12 weeks
	U.S. Stage 4 First Human Case in North America	SC Stage 4 <sup>5</sup> Suspected/Confirmed Case in North America			
		SC Stage 4a  1st Case CDC Region IV, not in SC	Consider <sup>6</sup> restrictions <sup>7</sup> on school activities, especially any involving travel in or to affected areas.		
	U.S. Stage 5 Spread Throughout U.S.	SC Stage 5 Widespread Outbreak in U.S.	Consider restrictions on school activities.		
		SC Stage 5a First case In South Carolina	School Closure not recommended in Stage 5a.		
			Consider Restrictions	Recommend <sup>8</sup> school Restrictions: <4 Weeks	Urge school Restrictions: ≤12 Weeks
		SC Stage 5b Localized clusters in South Carolina	No Rec. for School closure	Consider school closure: ≤4 Weeks	Recommend school closure: <12 Weeks
			Considers Restrictions on school activities	Recommend school Restrictions: ≤4 Weeks	Urge school Restrictions: ≤12 Weeks

<sup>&</sup>lt;sup>1</sup> For all PSI levels, DHEC will be reissuing and reemphasizing infection control guidance based on the epidemiology of the disease and the progression of the disease across the United States (droplets v. airborne transmission).

<sup>&</sup>lt;sup>2</sup> For an Influenza Pandemic with a Pandemic Severity Index of 1, SCDHEC anticipates that it will not recommend school closures.

### **Nutrition Considerations**

Estimates provided in December 2007 by the National Governor's Association Center for Best Practices indicate that there are 701,544 children in South Carolina in public school, grades Pre-K through 12, and 67,453 staff. 171,942 SC children (24.5 percent) of these students participate in the free and subsidized school breakfast and lunch program.

USDA September 2007 numbers further show that 469,481 students (66.9%) participate in the school lunch program. A 15% "cushion<sup>2</sup> added to these numbers yields over 737,000 meals served each day to SC children in public schools. In a theorized four-week closure for a Category 2 or 3 Pandemic, 14,752,729 meals that would normally be served at school will be missed. This loss of a resource will be felt most strongly in food-insecure households, whose school-age children are often routinely supplied with additional foods during breaks and vacations by the school or through community food bank or Red Cross programs.

Planning for alternative food programs for these children is addressed in continuity of operations planning by the SC Department of Education.

Numbers of school meal participants on the USDA website often vary by up to 15% month-to month. Adding 15% gives us a better estimate for planning.

<sup>&</sup>lt;sup>3</sup> For an Influenza Pandemic with a Pandemic Severity Index of 2 or 3, SCDHEC anticipates that it will consider the flowing surveillance triggers prior to recommending school closures: (1) a two-fold increase in ILI reports; (2) a similar increase in syndromic surveillance of febrile respiratory illnesses; (3) excessive student absenteeism; and (4) insufficient school staff due to illness to ensure safety of children

<sup>&</sup>lt;sup>4</sup> For an Influenza Pandemic with a Pandemic Severity Index of 4 or 5, SCDHEC anticipates a pre-emptive closure recommendation based on the epidemiology of the disease and the progression of the disease across the United States.

<sup>&</sup>lt;sup>5</sup> If the first human case in North America is in South Carolina, the South Carolina Response Stage would immediately jump from SC Stage 3 to SC Stage 5a.

<sup>&</sup>lt;sup>6</sup> Consider means that SCDHEC will decide on a recommendation to implement or not to implement the specified containment measure.

<sup>&</sup>lt;sup>7</sup> Restrictions on school activities: For the purposes of this plan, these include canceling or curtailing extracurricular and co-curricular activities for students, especially if travel to or within affected areas would be required. Activities which bring persons from the community (other than students, faculty/staff and parents) into the school facility may be curtailed or cancelled. Consideration should also be given to curtailing any school-sponsored or sanctioned travel by faculty or staff.

### **VIII. Community Mitigation Communications:**

### **Description of Planning Activities:**

Planning for informational pieces and strategies is overseen by DHEC Division of Media Relations. This division coordinates the pandemic communication mitigation strategy. It is also the Division responsibility for insuring that accurate and timely communication is delivered through effective and prompt channels.

During the planning process, several committees and divisions provided the knowledge base and assistance to the Division of Media Relations in the development of messages and production of materials.

The Health Services Deputyship area of DHEC hosts a group that generally meets weekly to discuss pandemic influenza issues and develop policies and procedures related to the disease. This group is composed of representatives from epidemiology, vaccine distribution, social work, public health preparedness, nursing, school nursing, public information and legal. The membership of this committee also acts as a focus group for materials produced by the Division of Media Relations.

The Pan Flu Outreach Committee (discussed earlier) assists in determining the communication needs of the regional DHEC offices and acts as a bridge between the regions and the Division of Media Relations. Methods of distribution of materials are planned through this Committee.

DHEC has created a substantial amount of educational information that is available on the agency's website under the heading of "Pandemic Influenza"

(www.scdhec.gov/administration/ophp/pandemic\_resources.htm). This information includes background explanations of pandemics and their causes and treatments and links to preparedness checklists, as well as social distancing measures that could be employed to slow the disease's spread. Print and video materials have been developed to define signs and symptoms, as well as the steps that can be taken to care for a sick person in the home until it is necessary to seek a higher level of care from a medical professional. This information is intended to help stem the flow of incoming patients, to slow the surge that is likely to be caused by a pandemic. Additional materials have been developed on infection control procedures, including posters, brochures and TV commercials on 1) covering your cough and sneeze, 2) wash your hands often, and 3) stay home when you're sick. For children, an entertaining video featuring an original song has been filmed and distributed to encourage frequent handwashing.

To support these efforts, DHEC has an in-house print shop that will produce written materials for just-in-time informational needs.

### **Development and Use of 2-1-1**

DHEC and its pandemic planning partner, United Way Association of South Carolina, have created a statewide 2-1-1 telephone hotline system that can be activated during a pandemic or other significant public health threat. The system can be reached from approximately 95% of all homes and cell phones across the state, with the remainder expected to activate in early 2008. Specific "talking points" and other sick-care information is being developed for use by operators, who will be capable of staffing the hotline 24/7. The 2-1-1 hotline will be a means for connecting people to the services they need, as well as connecting those services to capable volunteers. United Way provides multilingual support for this information service. Interpreters will be readily available through the United Way to assist the public. Under contract, United Way is responsible for the training of volunteers to man the hotline.

Planning is underway on the operational procedures and triggers for activating the 2-1-1 system during a pandemic. Activation procedures will include the specified channel for providing information to hotline operators. That channel will begin at either the state's emergency operations center Joint Information Center or at DHEC's EOC, depending on the pandemic stage and magnitude of its spread. Primary talking points are currently available and can be quickly provided for widespread dissemination. DHEC's public information officers will follow the agency's communications plan for distribution of emergency information. The current procedure to activate 2-1-1 calls for the Division of Media Relations to contact the president of the United Way of South Carolina to discuss the need for activation. The president can access the website that allows the activation of the calling areas. Activation can be made by county, phone provider or statewide.

### The 2-1-1 system will be used:

- Immediately after a pandemic is declared
- To assist the public in recognizing the signs of pandemic influenza versus seasonal influenza or other respiratory disease
- To provide local resource information
- To provide information about when to seek medical care
- To provide instructions on home care for the sick
- To provide information about staying home and not going to work or into the community
- To provide well persons the opportunity to offer their services as volunteers

### **Communication during Isolation and Quarantine:**

Planning for isolation and quarantine and related communications efforts has included the hiring of regional pandemic influenza outreach coordinators and public health clinical liaisons. The public health clinical liaisons (PHCLs) are the primary contacts for providing education and direct communication with hospitals and other health providers, with the outreach coordinators working primarily with community stakeholders, as well as hospitals and other health providers.

The PHCLs provide information to health care providers about the possible nature of the disease and the planning that should be done by health care providers. They are responsible for recruiting health care providers to participate in ILI surveillance and reporting and in submitting

influenza culture specimens to the state Bureau of Labs. Part of this effort includes the distribution of Pandemic Influenza and seasonal influenza educational materials to health care providers. This information can then be distributed by the health care providers to their patients and to patients who are non-acute, in order to advise them to remain home during a pandemic. Materials that have been developed for distribution to health care providers include: cover your cough posters, video and brochure on home sick care during a pandemic, infection control information, general pandemic preparedness brochure which includes how to tell the difference between seasonal influenza and a pandemic and when to seek medical care.

Once a patient has been isolated and family members quarantined, a pamphlet on "Pandemic Stress Tips" and the brochure on home sick care (which incorporates information about infection control) are provided. Persons who have been quarantined are provided this information, as well as the contact information of the local epidemiologist. Additionally, the local epidemiologist in charge of the isolation and quarantine for that area, maintains regular contact with the hospital and persons in quarantine.

### **Community Mitigation Communications**

Communication with the public regarding pandemic influenza began with the formulation of several state-level (and regional level) committees, including the State Public Health Advisory Council (Pandemic Influenza Coordinating Committee) and the Training Advisory Subcommittee. Both state-level committees include representatives from businesses, educational, faith-based organizations, and other nonprofit organizations. These stakeholders are provided updates on the development of communication materials and methods and provide advice on and/or approval of the products. These stakeholders are provided with copies of the materials to distribute to their publics. The regional pandemic influenza outreach coordinators, and the regional planning committees, further assist in the distribution of information and material. Materials and meetings have addressed all issues related to community mitigation including the types of community mitigation that might be enacted, infection control messages for businesses, adults and children, individual planning for pandemic, knowing the difference between a pandemic and seasonal influenza, knowing when to seek medical care, and behavioral health tips.

A speaker's bureau is available to business and community groups to meet statewide and local needs for information. Approximately 300 speakers have already reached more than 28,000 people. While the healthcare field has exhibited the greatest overall interest in the presentations to date, DHEC conducted 222 sessions for nearly 12,000 people representing businesses, families and faith groups. This basis of education and communication is the groundwork for community mitigation.

The written and much of the video information is already available on the DHEC website and the website for South Carolina Educational Television and additional information and updates will be included on the website during a pandemic. The websites will be broadly advertised through local media and in public announcements.

The 2-1-1 hotline, as discussed in detail above, will also be a critical form of communication to the public during a pandemic and will provide the general public with ready and rapid information and direction. The 2-1-1 system will also be used to assist in referring the public to the proper agencies for assistance in a pandemic.

SCDHEC's website will serve as another portal for information to the public. Information that is posted will include updates on the nature and magnitude of the disease in the state, infection control practices and recommended community mitigation strategies for the public. The website, which is already in use, is

http://www.scdhec.gov/administration/ophp/pandemic\_preparedness.htm. It is also accessible using the following address: www.scdhec.gov/panflu.

Plans call for DHEC's public information officers to work with others to widely distribute the message to discourage sick persons from going to work, school and other functions until they are no longer infectious. The Joint Information Center at the state's emergency operations center will be active during a pandemic and the JIC will conduct regular briefings for the media at that location. The agency will conduct an informational campaign on radio and TV in the spring of 2008 to educate the public on pandemic influenza in the home, school and workplace. For businesses, the need to review sick-leave policies is emphasized.

In the state Emergency Operations Center, DHEC will work closely with the members of Emergency Support Function (ESF) 24 – Business, to anticipate the communications needs of business and to distribute the information adequately, primarily through the SCDHEC website and 2-1-1.

### **Communications for the Educational Community**

The materials that have been discussed above and developed for the community may also be used specifically to educate and support parents and school-age children.

As part of DHEC's preparedness efforts, the agency has developed beneficial relationships with leaders of the South Carolina Department of Education, parent/teacher organizations and private school associations. These leaders assist in spreading preparedness messages to students and families through their normal communications channels. Many of these channels will be used during and after a pandemic. As in any emergency, a Joint Information Center will be established to effectively and efficiently communicate accurate and consistent messages to the public. DHEC's Division of Media Relations will provide public health leadership for a pandemic influenza JIC, as outlined in the agency's Communications Plan: Risk Communication and Health Information Dissemination.

As discussed in Section VII, South Carolina is a home rule state. Individual school districts will be provided with appropriate pandemic educational and instructional materials and messages by the SC Department of Education and DHEC, but each district maintains the authority to distribute the information directly to its parents and students in the fashion(s) that it deems appropriate. DHEC's role will be to further develop and refine additional information as requested or identified.

### **Communications to Healthcare Providers**

South Carolina's Health Alert Network (HAN) and the SC State Medical Asset/Resource Tracking Tool (SMARTT) will serve as the primary tools for communication with healthcare providers during a pandemic. Health alert messages regarding infection control, the nature of the disease, the status of the disease in South Carolina and other pertinent messaging will be provided through both sources. The Health Alert Network messages will be developed and sent by the SCDHEC's Division of Acute Disease Epidemiology. Messages sent through the SMARTT system to hospitals and emergency medical service providers will be provided by SCDHEC Division of EMS and Trauma. The content of the messages will be coordinated by both Divisions, as well as SCDHEC Media Relations.

### IX. Border Control/Ports of Entry

South Carolina does not have a CDC Quarantine Station. However, planning for a pandemic influenza has included planning across state lines with the eight Region IV southeastern states, and specific plans for the Port of Charleston.

### **Interstate Planning**

Following the 2004 and 2005 hurricane seasons, it was apparent that interstate planning was needed within the public health and medical emergency response systems. Pre-disaster collaboration and planning would have made the multi-state response to hurricanes like Charley, Ivan, Katrina, and Wilma more integrated and effective.

In March of 2006, Florida and Regional Emergency Coordinators from the U.S. Department of Human Services (HHS) brought together health and medical representatives from HHS Region IV states for a three-day meeting to address interstate planning and response. Since the initial meeting a core group of public health and medical (ESF-8) leaders have continued to meet on a quarterly basis to address disaster related health and medical issues. This group has become the Region IV ESF8 Unified Planning Coalition. This collaborative planning and the development of partnerships has been undertaken to enhance the member states' abilities to prepare for public health and medical response to incidents or events.

Since a pandemic influenza response will be led by the health agencies and ESF-8 partners, a specific planning effort for pandemic response has been initiated by the Unified Planning Coalition.

In March 2007, South Carolina hosted a pandemic influenza-specific meeting of the Unified Planning Coalition members, but expanded the meeting to include representatives from all eight states who don't normally attend the Coalition meetings. These representatives included epidemiologists, public information personnel, legal representatives, and state pandemic influenza coordinators. At the meeting, states reviewed the status of areas of pandemic planning including surveillance, communication/messaging, legal authority, continuity of operations planning, antiviral distribution, PPE policies/purchases, isolation and quarantine

policies/procedures, border issues, and travel restrictions. Policies among states were reviewed and compared and border issues were identified.

Border issues that were identified included:

- Need for consistent messaging between states
- antiviral distribution between bordering states who may or may not have purchased antivirals
- consistency between states/region/national of when to begin use of antivirals and how to use antivirals
- current MOUs between states don't address pandemic influenza scenarios
- non-state residents crossing borders for services
- timely surveillance communication between states
- differing school closure policies (essential for border populations)

From this meeting, it was determined that pandemic influenza specific meetings of Region IV should continue. Since that time, a Pandemic Influenza Workgroup of the Unified Planning Coalition has been established and the first organizational conference call has been implemented.

The following objectives for the Pandemic Influenza Workgroup were established:

- Regional consistency among plans: States can share policy decisions that are being made in their state so that other states can plan for the impacts those policies will have on them and make best efforts to align these policies across the region
- Identify critical issues (or points of agreement) that most need alignment across borders
  - Social Distancing Policies
  - School Closures
- Develop SOPs that address who states should contact in other states during a Pandemic event, specifically as it relates to surveillance
  - -Create a regional Pan Flu contact list
  - Decide on a tool for alerting each other (using a common system)
  - Decide on elements of information that other states would need
- Review and share messaging that will be going out to the public and what the triggers will be in each state, Align the messaging and triggers as much as possible
- Conduct a regional Pan Flu exercise
- Explore avenues to support Pan Flu projects when federal funding is cut
- Better familiarize Pan Flu Planners with FEMAs role in a Pan Flu event
- Crosswalk state plans to federal plans
- Platform to share resources and best practices

To facilitate the planning process, the Workgroup (South Carolina is the leader of this Workgroup) will hold monthly conference calls. The May 2008 meeting of the Unified Planning

Coalition was used to prioritize objectives and create an agenda for a comprehensive meeting to be held in South Carolina in Summer of 2008.

A listserve for the group has been established to facilitate planning.

### Port of Charleston

The information below was extracted from Annex 2, Attachment A Port Pandemic Influenza Plan. See Port Pandemic Influenza Plan for additional information and SOPs.

- Items addressed in the Port Pandemic Influenza Plan include:
- Overview of Port Pandemic Planning
- Measures to Protect the Health of the Port Community Workforce
- Assessing the Health of Crewmembers on Incoming Vessels
- Outreach and Education Activities/Tools

Protecting the seaports is an economic necessity for South Carolina and the Charleston, SC, community. The South Carolina Ports Authority estimates that international trade through its ports brings \$123 billion to the state and generates \$2.5 billion in state and local taxes. The port estimates that the international trade creates 281,660 jobs and pays a combined \$9.4 billion in salaries.

There are numerous vectors or potential sources that could trigger a pandemic event in South Carolina. All necessary precautions will be taken to ensure that the port is not the source of the pandemic event. Even so, the port community will still have to plan for and deal with the impacts a pandemic event could have on the port. Plans have to allow for the continued operation of the port as well as protecting the health and welfare of the community. In the early stages of a pandemic, actions may be taken by the federal government to safeguard our nation from the importation of a novel virus that could result in the loss of life to millions in our country. While the securing of our ports and borders may delay the spread of a pandemic, the nation could not afford an extended period of limited international trade. With pandemics lasting from 12 to 14 months, a method has to be developed to limit the disruption to international trade.

A "Family of Plans" is necessary to support effective pandemic planning. Those plans start at the national level and go all the way down to the individual stakeholder level. There are a number of these plans already in place and available to assist in regional and local planning efforts. The family of plans that supports pandemic planning at the port level includes the following:

- National Strategy for Pandemic Influenza (November 2005).
- Pandemic Influenza Implementation Plan (May 2006).
- Department of Homeland Security Plan (December 2006).
- Department of Homeland Security Component Plans (March 2007).

- Non-DHS Federal Agency Plans.
- South Carolina Pandemic Influenza Plan (April 2005).
- South Carolina DHEC Region 7 Pandemic Influenza Plan.
- Port Pandemic Plan.
- Individual Port Stakeholder plans.

This Port Pandemic Plan is designed to provide guidance and tools to assist the port community with Planning, Preparedness, Response and Recovery in the event there is an influenza outbreak to ensure that the Port of Charleston can continue to operate safely and efficiently even as the United States Government (U.S. Government) starts to increase the level of the Pandemic Response Stage.

Effective pandemic planning should also be viewed as critical to letting the customers of the Port of Charleston know that the port community has taken the necessary actions to ensure that any impacts from a pandemic are mitigated to the greatest extent possible.

Roles and Responsibilities of Port Planning/Response:

There are a number of entities who would be directly involved with Pandemic prevention and response activities within the Port of Charleston. The major stakeholders and their roles and responsibilities are described below:

Centers for Disease Control Division of Global Migration and Quarantine – Atlanta Quarantine Station (ATL-QS): The Secretary of the Department of Health and Human Services has statutory responsibility for preventing the introduction, transmission, and spread of communicable diseases in the United States. Under its delegated authority, the Division of Global Migration and Quarantine, works to fulfill this responsibility through a variety of activities, including the operation of Quarantine Stations at ports of entry, the establishment of standards for medical examination of person destined for the United States, and administration of interstate and foreign quarantine regulations which govern the international and interstate movement of persons, animals, and cargo. The legal foundation for these activities is found in Titles 8 and 42 of the US Code and relevant supporting regulations. The ATL QS has operational jurisdiction with authority to detain, medically examine or conditionally release individuals believed to be carrying a communicable disease of public health significance. The ATL QS bears primary responsibility for identifying and responding to human health risks arriving at all ports of entry in Georgia, North Carolina, South Carolina, and Tennessee.

South Carolina Department of Health and Environmental Control (DHEC): The South Carolina Department of Health and Environmental Control (DHEC) is the lead agency entrusted by the people of the state of South Carolina with the ultimate responsibility for the health of communities and the entire population. The vision of the DHEC is, "Healthy People Living in Healthy Communities." DHEC provides service and leadership to each of the eight regions in

their efforts to promote the protection of the public and the environment for the people of the state of South Carolina.

**DHEC Region 7**: The mission of the Region 7 Public Health Office is to promote, protect and improve the health and environment for the citizens of Berkeley, Charleston and Dorchester counties and to provide leadership in the prevention of disease and injury. DHEC Region 7 is entrusted by the State of South Carolina with responsibility for the health of the community. DHEC Region 7 bears primary responsibility for the management and monitoring of individuals with a disease of public health significance upon disembarkation from an international vessel at the port and for protection of the community against such a threat.

United States Coast Guard (USCG) Sector Charleston: Sector Charleston is responsible for all Coast Guard operations in the states of South Carolina and Georgia. The Sector Commander is the Captain of the Port (COTP) for the ports of Little River, Georgetown, Charleston, and Port Royal, SC. Marine Safety Unit (MSU) Savannah has COTP authority over the ports of Savannah and Brunswick, GA.

Every ship, when in a port of the United States, is subject to control by the federal government in so far as this control is directed toward verifying that the vessel is in compliance with international maritime conventions and U.S. law. 33 CFR § 6.04-8 gives the COTP the authority to "control the movement of any vessel within the territorial waters of the United States under his jurisdiction, whenever it appears to him that such action is necessary in order to secure such vessel from damage or injury, or to prevent damage or injury to any vessel or waterfront facility or waters of the United States."

Occasionally the Coast Guard will receive information from boarding or inspection teams, vessel agents, shipping companies, masters of ships at sea, or elsewhere, notifying the Coast Guard of a crew member with an illness. In the interest of public safety, the Coast Guard's goal is to notify public health officials of all shipboard illnesses as soon as possible to prevent the spread of communicable diseases. If necessary, the COTP will impose controls on the vessel's movements.

Discovery of the ill traveler can come from a variety of sources. It may be reported by the ship's master, agent, Coast Guard boarding team, CBP officer, or other sources. Regardless of the reporting source, DHEC's Report of Ill International Maritime Traveler attachment #2 should be faxed or emailed to the ship's master. It is the responsibility of the ship's master to have the form filled out and sent to the ATL-QS, the SC DHEC Region 7 Office and the Captain of the Port prior to entering the arrival port.

The U.S. Coast Guard will consult with public health officials to determine if the vessel should be directed to a certain location so medical personnel can evaluate the situation on board. Local public health officials will conduct the initial medical evaluation of the ill traveler and consider disease control measures with the consultation of the ATL-QS and DHEC Division of Acute Disease Epidemiology (DADE). The medical personnel will follow standard medical protocols when evaluating travelers with suspected infectious diseases and use appropriate personal protective equipment (PPE).

**United States Customs and Border Protection (CBP):** U.S. Customs and Border Protection, an agency of the Department of Homeland Security, is responsible for border protection and security. CBP enforces all laws and regulations of the U. S. federal government related to importation, exportation, traveler admissibility issues and immigration policies.

By virtue of their mission, CBP Officers are going to come into direct contact with potentially infected crewmembers and cargoes on foreign vessels arriving in the Port of Charleston. The CBP Avian Influenza Standard Operating Procedures (SOP) for the Port of Charleston describes the basic responsibilities for CBP, Veterinary and Agricultural Officers coming into contact with individuals or potential sources of the virus.

**Project SeaHawk:** The Pilot Port Security Project underway in the Port of Charleston is a focal point for agency activity and information sharing within the port. As such, Project SeaHawk will play a vital role in the prevention, detection, response and recovery from a pandemic outbreak. The Law Enforcement Task Force created by Project SeaHawk and the multitude of agencies that support Project SeaHawk daily activities make up a significant number of key stakeholders in the Port of Charleston. Several key processes are in place at Project SeaHawk already that will support efforts during all stages of a pandemic event including vessel tracking & targeting, Unified Command (UC) meetings and information/intelligence sharing activities.

**South Carolina State Ports Authority:** The mission of the South Carolina State Ports Authority (SCSPA) is to contribute to the economic development of South Carolina by fostering and stimulating waterborne commerce and shipment of freight. In pursuit of this mission, the Authority seeks to develop and operate efficient marine terminals and attract high-quality ocean carrier services.

For Other Stakeholders - The role of Maritime Association of South Carolina (MASC) should be described in the narrative - they represent all port Stakeholders listed including stevedores, SCSPA terminal operators, trucking association, non-union labor groups, vendors (taxi).

The South Carolina State Ports Authority owns and operates terminals in two port facilities: The Port of Charleston and the Port of Georgetown. These facilities are owner operated terminals, meaning the SCSPA owns the terminals and operates them with its own staff. SCSPA staff members work in all container cranes, run the container yard equipment, and operate gates on all terminals. The only exceptions are the licensed operators at the port, who license terminal space and operate their own yards and gates. SCSPA staff members work in all container cranes, run the container yard equipment, and operate gates on all terminals. The only exceptions are the licensed operators at the port, who license terminal space and operate their own yards and gates. SCSPA staff members operate the dockside container cranes and the yard equipment for licensed operators as well. In addition, the SCSPA police force consists of sworn officers responsible for physical security of all SCSPA facilities. SCSPA police interact with Vessel Security Officers (VSO) to share security expectations/measures and encounter vessel crew upon arrival while alongside.

Maritime Association of South Carolina (MASC): The Maritime Association of South Carolina has been actively promoting the interests of the Port of Charleston since 1926. Today, it

continues to contribute to the growth and success of the state's ports. Once limited to companies engaged in or providing services to the maritime trade, membership is now open to a much broader base of port supporters. The waterfront community has a number of highly regarded professional and trade organizations. MAPCHA, however, is an umbrella association, welcoming participation of other organizations and working for the improvement of the port as a whole.

Other Port Stakeholders: There are a wide variety of port stakeholders who are engaged in activities that will put them on the front lines of the effort to prevent, detect, respond to and recover from a Pandemic Influenza outbreak. These port stakeholders need to be cognizant of the efforts of the various regulatory agencies and know the roles they can play to assist. The primary role these agencies will play will be in surveillance and information sharing. These stakeholders have a significant amount of contact with vessels before their arrival and during their stay in the Port of Charleston. Examples of the port stakeholders who could be significantly impacted by a pandemic include, but are not limited to the following:

- Naval Weapons Station
- Charleston Navigation Company Pilots
- Docking Pilots
- Private Terminal Operators
- Vessel & shipping agents
- Organized labor unions
- Trucking Companies
- Rail
- Line-handler operations
- Vessel chandlery
- Vessel bunkering
- Tug/tow boat operators
- SCSPA Equipment Operators
- Ship Chandlers
- Surveyors
- Repair and Vendor Services
- Gangway Officers
- Port chaplains.

### **ATTACHMENT 1**

### **Guidelines for Home Care for Pandemic Flu**

### What is Pandemic Flu?

"Pandemic Flu" (or Pan Flu) is a global outbreak of a new type of influenza. It is more serious than a seasonal flu because it is a new strain that spreads all over the world and affects a large number of people with greater severity. If you are caring for a loved one during a pandemic, it's important to take steps to protect yourself and others.

### **Prepare NOW for a Flu Pandemic**

Make a plan now for a flu pandemic. Plan what you will do if members of your household have to stay home from work or school. Know what you will do if you have to stay separated from others for a period of time. **Keep a 2-week supply of food, water, medications and a disaster supply kit on hand.** 

### Pandemic Flu Caregiving Supplies:

- Thermometer
- Soap and alcohol-based hand sanitizer
- Disposable gloves
- Surgical masks. Consider respirators (specialized protective masks) for caregivers.
- Acetaminophen or ibuprophen or aspirin
- Bleach
- Paper towels and tissues
- Ingredients for rehydration drink: Sugar, baking soda, salt, salt substitute, powdered soft drink (such as Kool-Aid<sup>TM</sup>).
- Drinking straws
- Any special supplies that you normally use to care for an infant or toddler or elderly person or a person with a chronic illness.

### **Recognize Pandemic Flu Symptoms**

Watch for these common symptoms:

- Fever with cough and/or runny nose
- Muscle pain or body aches
- Headache
- Diarrhea (more common in children).

Call your healthcare provider if any of these symptoms appear suddenly or are severe.

### **Prevent the Spread of Pan Flu**

Healthy habits will help keep you and others from getting and passing on the pan flu virus.

- WASH your hands often with soap and water or alcohol-based hand sanitizer.
- Cover your mouth and nose with a tissue when you cough or sneeze and wash your hands afterward. Put used tissues in a wastebasket.
- Cough or sneeze into your upper sleeve if you don't have a tissue.
- Keep your hands away from your eyes, nose and mouth to prevent germs from entering your body.

### During a pandemic, any person with signs of the flu will be expected to:

- Stay home from work, school, running errands, and avoid contact with others.
- Consider wearing a surgical mask when around others.

### When a Household Member Is Sick

Flu virus is spread when respiratory droplets from the mouth and nose of an infected person are spread to others. So, protect yourself and others in your home:

- Household members should avoid sharing computers, pens & papers, clothes, towels, sheets & blankets, food or eating utensils, cups & glasses, soda or water bottles.
- You may also use disposable dishes, cups and flatware.
- The sick person's dishes & laundry can be washed with the rest of the household's. Wash your hands after handling dirty laundry.
- Clean commonly touched surfaces in the home or workplace. You can use a commercial cleaner or mix your own solution.

### Disinfectant for household surfaces:

1 gallon of water and ¼ cup of bleach Mix up a fresh batch at least once a day.

- Wear disposable gloves when in contact with or cleaning up body fluids.
- Do not share masks or respirators.

**If possible, one person** should be the caregiver to limit exposures and reduce spread of disease.

- For best protection when giving care to the sick person, consider wearing a specialized protective mask (respirator.)
- For more information on masks and respirators, go to www.scdhec.gov.
- Remember: NO visitors.

### **Practice Hand Hygiene**

Person in the household should frequently wash their hands. Caregivers should always wash their hands before providing care. After caring for your loved one, wash again <u>and</u> apply alcohol-based hand sanitizer.

### Follow these steps for proper hand hygiene:

- 1. Wet hands with warm, running water and apply liquid soap.
- 2. Rub hands vigorously for at least 15 seconds, covering all surfaces and fingers.
- 3. Scrub nails by rubbing them against the palms of your hands.
- 4. Rinse your hands with water.
- 5. Dry your hands thoroughly with a paper towel and use the paper towel to turn off the faucet. A shared towel will spread germs.

### Care for a Loved One with the Flu

A person with the flu should:

- Rest and drink plenty of liquids
- Avoid alcohol or tobacco
- Take medications to relieve flu symptoms.

In some cases, a healthcare provider may prescribe antiviral drugs to treat the flu. Antibiotics (such as penicillin) don't cure the flu.

### **Prevent Dehydration**

Dehydration occurs when the body loses too much water and the water is not replaced quickly enough. Dehydration can be serious or even fatal, especially in infants and the elderly.

Begin fluids at the first signs of the flu. Contact a healthcare provider for advice before giving electrolyte-containing fluids to infants or to people with conditions such as heart or kidney disease.

- If your loved one has diarrhea or vomiting, give electrolyte-containing fluids.
  - Young children may have fluids such as Pedialyte<sup>TM</sup>.
  - Teens and adults may have sports drinks such as Gatorade<sup>TM</sup>.
  - Teens and adults may also have a commercially available powdered rehydration drink, or you may make a rehydration drink at home (see the recipe, below.)
- In addition to plenty of liquids, give ice and light, easily digested foods, such as soup and broth.
- If drinking liquids makes nausea worse, give one sip at a time until your loved one can drink again.
   Using drinking straws may help you give fluids to your loved one.
- If you cannot get your loved one to take fluids, call your healthcare provider. *Remember*, *dehydration is dangerous*.

### Rehydration Drink for People 12 and Older

- ♦ 1 quart of water (tap water is OK)
- ♦ ½ tsp baking soda
- ♦ ½ tsp table salt
- ♦ 3 to 4 Tbsp sugar
- ♦ ¼ tsp salt substitute, if available

**Measure all ingredients carefully.** Mix well and flavor with lemon juice or sugar-free Kool-Aid ®

### **Reduce Fever / Symptoms**

- Give plenty of fluids
- Give fever-reducing medicines, such as acetaminophen (Tylenol), or anti-inflammatory

### **Guidelines for Home Care for Pandemic Flu**

medicines like ibuprofen (Motrin) as directed on the container or by your healthcare provider. Aspirin can be given to adults.

- Do not give aspirin to anyone under age 20.
- To relieve discomfort, give a sponge bath with lukewarm water.
- Keep a record of your loved one's temperatures in your care record.

### **Monitor Pandemic Flu Symptoms**

Consider keeping a care record to track your ill household member's progress and to take with you should you need to see your healthcare provider. Write down what you see or do, such as fever, flu symptoms, and any medicines given (include the number of pills or teaspoons given.) Include the date and time. Make a new entry at least every 4 hours, or whenever the symptoms change.

### Call a healthcare provider if your loved one has:

- A high fever
  - o Babies up to 3 months old: rectal temperature of 100.4°F or higher.
  - o Babies 3 to 24 months old: rectal temperature 103°F or higher.
  - o Children 2 and older through Adults: oral temperature greater than 105°F
- Shaking chills
- Coughing that produces thick mucus
- Shortness of breath or trouble breathing
- Dehydration (decreased urination, decreased tears, dry mouth)
- Worsening of an existing medical condition.

## Call 911 for any of the signs below which suggest your loved one's condition is worsening:

- Irritability, decreased alertness and/or confusion
- Difficult breathing, fast breathing or chest pain with each breath
- Bluish skin
- Stiff neck
- First-time seizure or seizure that is prolonged.

Pan Flu Prepare. Prevent. Plan Now.

# **Guidelines for Home Care for Pandemic Flu**

Developed January 2008 by SC DHEC
Bureau of Disease Control



South Carolina Department of Health and Environmental Control

The guidelines found in this brochure are current as of the date of publication.

Pandemic Flu guidance and recommendations may be subject to change in the event of a pandemic.

### **ATTACHMENT 2**





# Pandemic Influenza Self Care Tips: Dealing with stress brought on by isolation and quarantine

### Things to Remember if Faced with a Pandemic

- No one who experiences a disaster is untouched by it.
- We each have different needs and different ways of coping.
- It is normal to feel anxious about your family's and your own health and safety.
- Stress along with fear, disbelief, grief, and anger are normal reactions to a catastrophic event.
- Fear of the unknown or of exposure can also cause increased stress.
- Focusing on our strengths and abilities will help you to heal.
- Accepting help from social supports, community programs and resources can promote a healthy psychological recovery.
- Acknowledging our feelings helps us recover.
- Gathering and following expert information from credible sources can help direct your actions and minimize stress.

### Signs that Adults May Need Stress Management Assistance

- Difficulty communicating thoughts
- Difficulty sleeping
- Difficulty maintaining balance
- Easily frustrated
- Increased use of drugs/alcohol
- Limited attention span
- Headaches/stomach problems
- Tunnel vision/muffled hearing
- Disorientation or confusion
- Difficulty concentrating
- Depression, sadness
- Feelings of hopelessness
- Mood-swings
- Crying easily
- Overwhelming guilt and self-doubt

### **Ways to Ease Stress and Build Resilience**

- When possible talk with someone about your feelings of fear, anger, sorrow, and other emotions even though it may be difficult.
- Take steps to promote your own physical and emotional healing by staying active and maintaining as many daily life patterns as the isolation or quarantine allows. This healthy outlook will help yourself and your family. (i.e. healthy eating, rest, exercise, relaxation, meditation.)
- As much as possible maintain a normal household and daily routine, limiting demands of yourself and your family.
- Maintain contact with family, friends and social supports, e.g. church or pastor. Isolation and quarantine do not prevent you from having e-mail or telephone communications.
- Establish and follow a family pandemic influenza plan. Feeling that there is something that you can do may be very comforting.
- Reduce tension by practicing relaxation techniques, e.g. deep breathing



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- Try to replace negative thoughts with positive ones.
- Keep things in perspective

### Where Can I Find Help?

If you need additional assistance contact your local public health department, community mental health center, a counselor, or a mental health professional.

The information in this fact sheet was adapted from a publication by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. http://mentalhealth.samsha.gov







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### **ATTACHMENT 3**







# After a Disaster: A Guide for Parents and Teachers

Note: Information based on brochure developed by Project Heartland -- A Project of the Oklahoma Department of Mental Health and Substance Abuse Services in response to the 1995 bombing of the Murrah Federal Building in Oklahoma City. Project Heartland was developed with funds from the Federal Emergency Management Agency in consultation with the Federal Center for Mental Health Services.

Natural disasters such as tornados, or man-made tragedies such as bombings, can leave children feeling frightened, confused, and insecure.

Whether a child has personally experienced trauma or has merely seen the event on television or heard it discussed by adults, it is important for parents and teachers to be informed and ready to help if reactions to stress begin to occur.

Children respond to trauma in many different ways. Some may have reactions very soon after the event; others may seem to be doing fine for weeks or months, then begin to show worrisome behavior. Knowing the signs that are common at different ages can help parents and teachers to recognize problems and respond appropriately.

### **Preschool Age**

Children from 1-5 years in age find it particularly hard to adjust to change and loss. In addition, these youngsters have not yet developed their own coping skills, so they must depend on parents, family members, and teachers to help them through difficult times.

Very young children may regress to an earlier behavioral stage after a traumatic event. For example, preschoolers may resume thumb sucking or bedwetting or may become afraid of strangers, animals, darkness, or "monsters." They may cling to a parent or teacher or become very attached to a place where they feel safe.

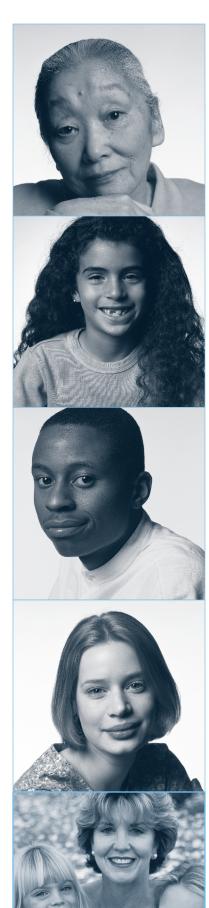
Changes in eating and sleeping habits are common, as are unexplainable aches and pains. Other symptoms to watch for are disobedience, hyperactivity, speech difficulties, and aggressive or withdrawn behavior. Preschoolers may tell exaggerated stories about the traumatic event or may speak of it over and over.

### **Early Childhood**

Children aged 5-11 may have some of the same reactions as younger boys and girls. In addition, they may withdraw from play groups and friends, compete more for the attention of parents, fear going to school, allow school performance to drop, become aggressive, or find it hard to concentrate. These children may also return to "more childish" behaviors; for example, they may ask to be fed or dressed.



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### Adolescence

Children 12-14 are likely to have vague physical complaints when under stress and may abandon chores, school work, and other responsibilities they previously handled. While on the one hand they may compete vigorously for attention from parents and teachers, they may also withdraw, resist authority, become disruptive at home or in the classroom, or even begin to experiment with high-risk behaviors such as drinking or drug abuse. These young people are at a developmental stage in which the opinions of others are very important.

They need to be thought of as "normal" by their friends and are less concerned about relating well with adults or participating in recreation or family activities they once enjoyed.

In later adolescence, teens may experience feelings of helplessness and guilt because they are unable to assume full adult responsibilities as the community responds to the disaster. Older teens may also deny the extent of their emotional reactions to the traumatic event.

### How to Help

Reassurance is the key to helping children through a traumatic time. Very young children need a lot of cuddling, as well as verbal support. Answer questions about the disaster honestly, but don't dwell on frightening details or allow the subject to dominate family or classroom time indefinitely. Encourage children of all ages to express emotions through conversation, drawing, or painting and to find a way to help others who were affected by the disaster.

Try to maintain a normal household or classroom routine and encourage children to participate in recreational activity. Reduce your expectations temporarily about performance in school or at home, perhaps by substituting less demanding responsibilities for normal chores.

Finally, acknowledge that you, too, may have reactions associated with the traumatic event, and take steps to promote your own physical and emotional healing.

### Where can I find help?

For additional assistance contact your local public health department, community mental health center, a counselor, or a mental health professional.

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### Después de un desastre: una guía para padres y maestros

# After a Disaster: A Guide for Parents and Teachers

Nota: la información basada en este folleto desarrollada por Project Heartland—Un proyecto de Oklahoma Department of Mental Health and Substance Abuse Service en respuesta a las bombas de 1995 en Murrah Federal Building en la ciudad de Oklahoma. El proyecto de Heartland fue desarrollo con fondos de Federal Emergency Management Agency en consulta con The Federal Center for Mental Health Services.

Desastres naturales como tornados, o tragedias hechas por el hombre como por ejemplo bombas, pueden dejar los sentimientos de los niños inseguros, asustados y confusos. Ya sea que un niño haya experimentado un trauma personal o haya visto un evento en la televisión o escuchó la discusión de un adulto, es importante para los padres y maestros estar informados y listos para ayudar en caso que reacciones al estrés empiecen a ocurrir.

Los niños responden a traumas en diferentes formas. Algunos posiblemente tengan reacciones inmediatamente después del evento; otros posiblemente se vean bien por semanas o meses, después empiecen a mostrar comportamientos inquietantes. Conocer los signos que son comunes en diferentes edades, pueden ayudar a los padres y maestros a reconocer problemas y responder apropiadamente.

### **Edad Preescolar**

Los niños entre las edades de 1 a 5 años encuentran particularmente muy difícil el ajustarse a cambios y pérdidas. En adición, estos menores todavía no han desarrollado sus propias habilidades de como sobrellevar el estrés, así que ellos dependen de los padres, miembros de la familia y maestros para ayudarse a atravesar tiempos difíciles.

Después de un evento traumático, los niños muy pequeños posiblemente regresen a una etapa de comportamiento temprano. Por ejemplo, los niños preescolares posiblemente regresen a chuparse el dedo o mojen la cama o posiblemente le tengan miedo a extraños, animales, la oscuridad o a los "monstruos." Ellos talvez se aferren al padre de familia o maestro o se sientan muy unidos a un lugar donde ellos se sienten seguros.

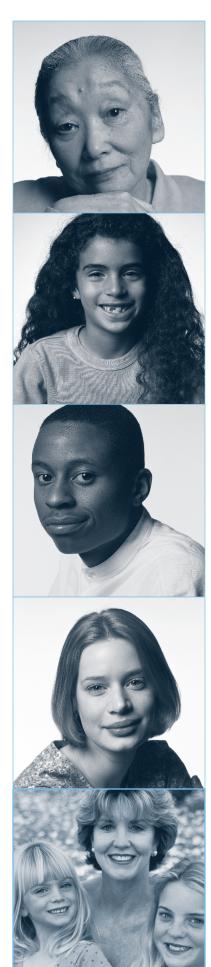
Los cambios en el hábito de dormir y comer son comunes, como también dolores y molestias inexplicables. Otros síntomas que hay que vigilar es la desobediencia, hiperactividad, dificultades para hablar o un progresivo comportamiento retraído. Los preescolares talvez digan historias exageradas sobre el evento traumático o talvez hablen sobre ello una y otra vez.

### Niñez Temprana

Los niños entre las edades de 5 a 11 años posiblemente tengan las mismas reacciones de un muchacho o muchacha joven. En adición, ellos posiblemente estén retraídos de grupos de juego y amigos, compitan más por la atención de los padres, miedo de ir a la escuela, permitirse bajo rendimiento para abandonar los estudios, empezar a ser agresivo o tener dificultades para concentrarse. Estos niños talvez regresen a tener



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comportamiento de "niños pequeños," por ejemplo, ellos talvez pidan que se les alimente o que se les cambien la ropa.

### **Adolescentes**

Los niños entre las edades de 12 a 14 años son mas propensos a quejarse por dolencias físicas vagas cuando están bajo estrés y pueden abandonar tareas, trabajo de la escuela y otras responsabilidades que ellos anteriormente podían manejar. Mientras que en una mano ellos pueden competir vigorosamente por atención de sus padres y maestros, ellos también pueden estar retraídos, resistir la autoridad, empezar a ser negativos en el hogar o la clase o también pueden empezar a experimentar un comportamiento de alto riesgo como beber o abusar de las drogas. Estos jóvenes están en una edad de desarrollo en la cual las opiniones de otros son muy importantes.

Ellos necesitan ser vistos como "normales" por sus amigos y están menos preocupados de relacionarse bien con adultos o participar en actividades familiares o recreativas que ellos anteriormente disfrutaban.

En la adolescencia tardía, los adolescentes posiblemente tengan sentimientos de que no ayudan los suficiente y culpabilidad porque ellos no pueden asumir responsabilidades completas de un adulto de la forma en que la comunidad responde a desastres. Los adolescentes mayores pueden también negar expresar sus reacciones emotivas a eventos traumáticos.

### Cómo Ayudar

Confortar es la clave para ayudar a los niños en tiempos traumáticos. Niños muy pequeños necesitan muchos abrazos, así como apoyo verbal. Responda a las preguntas sobre desastres, pero no viva en el pasado hablando sobre detalles espantosos o permita que el tema domine por tiempo indefinido a la familia o clase. Motive a los niños de todas las edades a expresar sus emociones por medio de conversaciones, dibujos o pinturas y encuentre la forma de ayudar a otros que fueron afectados por el desastre.

Trate de mantener una rutina normal en el hogar o clase y motive a niños a participar en actividades recreativas. Reduzca temporalmente sus expectativas sobre actividades en el hogar o escuela, sustituyendo menos demandas de responsabilidad por tareas normales.

Finalmente, sepa que, usted también puede tener reacciones asociadas con el evento traumático y debe tomar los pasos para promover la propia curación de sus heridas físicas y emocionales.

### ¿Dónde puedo encontrar ayuda?

Para asistencia adicional, contacte a su departamento de salud pública local, el centro de salud mental comunitaria, un terapeuta o un profesional de salud.

Esta hoja de información, fue adaptada por una publicación de Mental Health Services of Substances Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. http://mentalhealth.samhsa.gov



### Reaction of Children to a Disaster

### How do children typically react to disasters?

Many feelings and reactions are shared by people of all ages in response to a disaster. However, special attention is required to meet the needs of children. Typical reactions for children of all ages include:

- Fears of future disasters
- Loss of interest in school
- Regressive behavior
- Sleep disturbances and night terrors
- Fears of events associated with disaster

### What are some age-specific responses?

**Preschool (ages 1-5):** Children in this age group are particularly vulnerable to disruption of their previously secure world. Because they generally lack the verbal and conceptual skills necessary to cope effectively with sudden stress by themselves, they look to family members for comfort. Abandonment is a major fear in this age group, and children who have lost family members and even pets or toys will need special reassurance. Typical responses include:

- Thumb sucking
- Bed wetting
- Fears of the darkness or of animals
- Clinging to parents
- Night terrors
- Loss of bladder or bowel control, constipation
- Speech difficulties (e.g., stammering)
- Loss or increase of appetite

### Some things that may be helpful are:

- Encourage expression through play reenactment
- Provide verbal reassurance and physical comforting
- Give frequent attention
- Encourage expression regarding loss of pets or toys
- Plan calming, comforting pre-bedtime activities
- Allow short term changes in sleep arrangements such as allowing children to sleep with a light on or with the door open, or on a mattress in the parents' or another child's room, or remaining with the child while the child falls asleep.

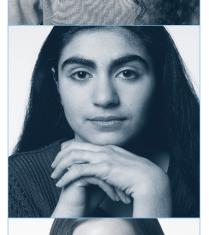
**Early childhood (ages 5-11)** Regressive behavior is most typical of this group. Loss of pets or prize objects is particularly difficult for them to handle.

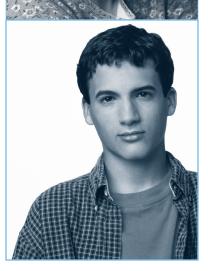
### Typical responses include:

- Irritability
- Whining
- Clinging
- Aggressive behavior at home or school
- Overt competition with younger siblings for parents attention
- Night terrors, nightmares, fear of darkness
- School avoidance
- Withdraw from peers
- Loss of interest and poor concentration in school









### Some things that are helpful are:

- Patience and tolerance
- Play sessions with adults and peers
- Discussions with adults and peers
- Relaxation of expectation at school or at home (with a clear understanding that this is temporary and the normal routine will be resumed after a suitable period)
- Opportunities for structures but not demanding chores and responsibilities at home
- Rehearsal of safety measures to be taken in future disasters

**Pre-adolescent (ages 11-14):** Peer reactions are especially significant in this age group. The child needs to feel that his/her fears are both appropriate and shared by others. Responses should be aimed at lessening tensions and anxieties and possible guilt feelings.

### Typical responses include:

- Sleep disturbance, appetite disturbance
- Rebellion in the home
- Refusal to do chores
- School problems (e.g., fighting, withdraw, loss of interest, attention seeking behavior)
- Physical problems (e.g., headaches, vague aches and pains, skin eruptions, bowel problems, psychosomatic complaints)
- Loss of interest in peer social activities

### Some things that may be helpful are:

- Group activities geared toward the resumption of routines
- Involvement with same age group activity
- Group discussions geared toward relieving the disaster and rehearsing appropriate behavior for future disasters
- Structured but undemanding responsibilities
- Temporary relaxed expectations of performance at school or at home
- Additional individual attention and consideration

**Adolescent (ages 14-18):** Most of the activities and interest of the adolescent are focused in his/her own age group peers. They tend to be especially distressed by the disruption of their peer group activities and the lack of access to full adult responsibilities in community efforts.

### Typical responses include:

- Psychosomatic symptoms (e.g., rashes, bowel problems, stomach aches)
- Headaches and tension
- Appetite and sleep disturbance
- Amenorrhea (loss of menstrual cycle for girls)
- Agitation or decrease in energy level
- Apathy
- Irresponsible and/or delinquent behavior
- Struggles over parental control
- Poor concentration

### Some things that might be helpful are:

- Encourage participation in the community rehabilitation or reclamation work
- Encourage resumption of social activities, athletics, clubs, etc.
- Encourage talking about the disaster experiences with peers, extended family members, significant others
- Temporarily reduce expectations for level of school and general performance
- Encourage, but do not insist upon, discussion of disaster fears within the family setting

### Where can I find help?

For additional assistance contact your local public health department, community mental health center, a counselor, or a mental health professional.

The information in this fact sheet was adapted from a publication by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. http://mentalhealth.samhsa.gov



### La reacción de los niños ante un desastre

### **Reaction of Children to a Disaster**

### ¿Cómo reaccionan típicamente los niños ante un desastre?

Muchos sentimientos y reacciones son compartidos por personas de todas las edades en respuesta a un desastre. Si embargo, atención especial es requerida para poder llenar las necesidades de los niños. Las reacciones típicas de los niños de todas las edades incluyen:

- Miedo a futuros desastres
- Perdida del interés en la escuela
- Comportamiento regresivo
- Disturbio del sueño y noches de terror
- Miedo a eventos relacionados a desastres

### ¿Cómo son las reacciones específicas en ciertas edades?

Preescolar (edad de 1 a 5 años): los niños en este grupo de edad son particularmente vulnerables a trastornos de la seguridad de su mundo anterior. Porque ellos generalmente carecen de habilidades conceptuales que son necesarias para sobrellevar de una forma efectiva el estrés inesperado, ellos buscan a los miembros de su familia para ser confortados. El abandono, es el miedo principal en este grupo y niños que han perdido miembros de su familia o hasta mascotas o juguetes, necesitan ser confotados de una forma especial. Las respuestas típicas incluyen:

- Chuparse el dedo
- Mojar la cama
- Miedo a la oscuridad o animales
- Aferrarse a los padres
- Noches de terror
- Pérdida del control de la vejiga o de los intestinos, estreñimiento.
- Dificultades para hablar (ejemplo: tartamudear)
- Pérdida o aumento de apetito

### Algunas cosas que posiblemente ayuden incluyen:

- Anime las expresiones a través de la recreación del trauma
- Proveer consuelo verbal y confortar de una forma física
- Dar atención frecuente
- Anime a la expresión sobre pérdidas de mascotas o juguetes
- Planee actividades para calmar confortar antes de ir a dormir
- Permita los cambios por un tiempo corto en los arreglos para ir a dormir, como permitirles dormir con una luz o con la puerta abierta, en una cama en el mismo cuarto de los padres o en otra habitación de los niños o permanecer con el niño mientras se duerme.

**Niñez temprana (edades de 5 a 11 años)** comportamientos regresivos es lo más común en este grupo. La pérdida de mascotas o de objetos queridos es lo que particularmente les es difícil de manejar.

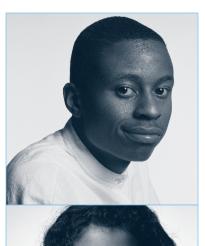
### Respuestas típicas incluyen:

- Irritabilidad
- Lloriquear
- Aferrarse
- Comportamiento agresivo en la casa o escuela
- Competición abierta con otros hermanos jóvenes por la atención de los padres
- Noches de terror, pesadillas, miedo a la oscuridad
- Aludir la escuela

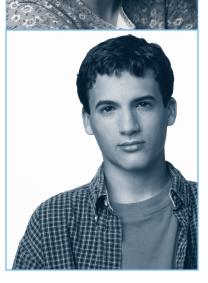


outh Carolina Department of Health and Environmental Control

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- Retirarse de los grupos afines
- Perdida del intereses y poca concentración en la escuela

### Algunas cosas que pueden ayudar son:

- Paciencia y tolerancia
- Hacer sesiones con adultos y grupos afines
- Tener discusiones con adultos y con grupos afines
- Disminuir las expectativas en la escuela o casa (con un claro entendimiento que es algo temporal y que la rutina normal regresará después de un periodo conveniente)
- Oportunidades para estructuras, pero sin demandar tareas o responsabilidades en casa
- Prácticas de medidas de seguridad que deberán ser tomados en futuros desastres

Adolescencia temprana (edades de 11 a 14 años): las reacciones son especialmente significativas en este grupo de edad. Los niños necesitan sentir que sus miedos son tanto apropiados como compartidos por otros. Las reacciones deben de ser dirigidas a disminuir la tensión y ansiedad y los sentimientos de culpabilidad.

### Respuestas típicas incluyen:

- Disturbio en el sueño y apetito
- Rebelión en el hogar
- Rehusarse a hacer tareas
- Problemas en la escuela (por ejemplo: peleas, retirarse, pérdida del interés, comportamiento que busca atención)
- Problemas físicos (por ejemplo: dolor de cabeza, dolores y malestares vagos, erupciones en la piel, problemas con los intestinos, quejas psicosomáticas)
- Pérdida del interés en actividades sociales con grupos afines

### Algunas cosas que pueden ayudar son:

- Actividades de grupo dirigidas a adaptarse a la reanudación de la rutina
- Envolverse en actividades con grupos afines
- Discusión de grupo dirigido a aliviar el desastre y ensayar comportamiento adecuado en futuros desastres
- Responsabilidades sin demanda pero con estructura
- Expectativas sin demanda por un tiempo temporal, en el rendimiento en la escuela y casa
- Consideración y atención individual adicional

Adolescentes (edades 14-18 años): la mayoría de la actividad e intereses de los adolescentes están enfocados en los grupos de su misma edad. Ellos tienden a estar especialmente angustiados por la interrupción de las actividades de los grupos afines y la falta de acceso a responsabilidades completas de un adulto en los esfuerzos comunitarios.

### Respuestas típicas incluyen:

- Síntomas psicosomáticos (ejemplo erupciones, problemas intestinales, dolores de estomago)
- Dolor de cabeza y tensión
- Disturbios en el apetito y sueño
- Amenorrea (pérdida de la menstruación en las chicas)
- Agitación o pérdida del nivel de energía
- Apatía
- Irresponsabilidad y/o comportamiento delictivo
- Lucha debido al control de los padres
- Poca concentración

### Algunas cosas que pueden ayudar son:

- Motive a la participación en la rehabilitación de la comunidad o recuperación del trabajo
- Motive la reanudación de actividades sociales, atléticas, clubes, etc.
- Motive hablar sobre las experiencias del desastre con personas de su misma edad, miembros de la familia y otros seres queridos.
- Reduzca de una manera temporal las expectativas en el rendimiento general y de la escuela.
- Anime, pero no insista sobre las discusiones de familia sobre el miedo al desastre.

### ¿Dónde puedo encontrar ayuda?

Para asistencia adicional contacte a su departamento de salud pública local, centro de salud mental comunitaria, a un asesor o a un profesional de salud mental.

La información en este documento, fue adaptada por una publicación de Mental Health Services of Substances Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. http://mentalhealth.samhsa.gov

### **ATTACHMENT 4**

# **YOUR GUIDE TO**

# Preparing for Pandemic Flu



South Carolina Department of Health and Environmental Control

### Pan Flu:

Prepare. Prevent. Plan Now.

Because of the potential for an influenza pandemic, the South Carolina Department of Health and Environmental Control wants you to know more about this public health threat. This pocket guide includes basic information about a pandemic and the threat it poses to you and your family. It also tells you what you can do to prepare for it.

To learn more about what you can do to prepare, visit http://www.scdhec.gov/panflu or contact your local public health department.



Promoting and protecting the health of the public and the environment

Disponible en Español

ML-025329 / Rev. Date 03/07

(English versions)

ML-025330 / Rev. Date 03/07

(Spanish versions)

# DURING A PANDEMIC FLU

You might be asked or required to take certain actions to help prevent the spread of pandemic influenza. Follow instructions from public health officials and your health care provider.

### PUBLIC HEALTH INSTRUCTIONS

You may be asked or required to do things to help hold back the spread of a pandemic should it reach your community. If local public health officials or your healthcare provider ask you to take certain actions, it is very important that you follow those instructions.

Here are some examples of what you could be asked or required to do:

**Stay home.** Stay home anytime you are sick. Keep children home from school if they are sick. Staying home will be especially necessary during a pandemic to limit the spread of the disease.

You could be asked to stay away from large public gatherings such as sporting events and festivals. This request could be made of you even if you are healthy. Many public events could be cancelled during a pandemic because large gatherings of people help spread the flu virus.

Isolation and quarantine are public health actions used to contain the spread of a contagious disease. It will be important to follow isolation and/or quarantine instructions.

**Isolation** is for people who are already ill. These sick people will be separated from people who are healthy. Separating the sick person from others can help slow or stop the spread of disease. People who are isolated can be cared for in their homes, in hospitals, or in other health care facilities. Isolation is usually voluntary. Governments have the power to require the isolation of sick people in order to protect the public.

**Quarantine** is for people who have been exposed to the disease but are not sick. Quarantined people are separated from others. Even though the person is not sick at the moment, they were exposed to the disease and could become infectious and spread the disease to others. Quarantine can help slow or stop this from happening. States generally have the power to enforce quarantines within their borders.

# Prevent the Spread of Disease at Home

There are steps you can take at home to care for a family member who becomes ill during a pandemic.



### Isolate the ill person WITHIN your home.

A sick person should only leave the house to see a doctor or health care provider. Even if they start feeling better, the sick person should stay home for two full weeks after flu symptoms first appear. Do not allow visitors in your home while the person is sick.

Choose a room just for the sick person so they are separated from others. The room should have a door that can be closed.

The ill person should wear a protective mask when anyone is in the same room or car. People in the room or car with the sick person should also wear a protective mask. Wear disposable gloves when cleaning or disinfecting any area where the sick person has been.

### Wash hands with soap or use alcohol-based hand rub.

Everyone in the home should wash their hands with soap after contact with others, before preparing food, and before eating. Be especially careful to wash hands after touching tissues or surfaces soiled with saliva or nasal drainage. Remind children to wash their hands often.

### Keep the house clean.

On a daily basis, clean surfaces and commonly used items such as microwaves, refrigerator handles, phones, remote controls, doorknobs and handles, toilet seats and handles, faucets, light switches and toys. Use a labeled household disinfectant or a chlorine bleach mixture of 1/4-cup bleach with 1 gallon of cool water.

### Cover nose and mouth when sneezing or coughing.

Remind children and others to cover their noses and mouths with a tissue when sneezing or coughing, or to sneeze or cough into their sleeves. Put used tissues in a wastebasket, then wash hands with soap or use an alcohol-based rub.

Even when a person is wearing a mask, they should cough or sneeze into their sleeve.

### Watch all household members for symptoms of respiratory illness.

Contact your health care provider if you or a member of your household develops fever or other symptoms such as chills, cough, sore throat, headache, or muscle aches.

### Keep supplies on hand.

Keep masks, gloves, soap, tissues, paper towels and cleaning supplies on hand.

Make sure all sinks and restrooms are stocked with soap and paper towels.

Place tissues in all bedrooms and common areas like living, dining, family and computer rooms.

# **Your Own Important Numbers**



Write down important numbers and keep them close. These include friends and family home and cellular numbers, your doctor or clinic, and your children's school.

# GETTING INFORMATION

Local radio and television stations will be your best sources for information during a pandemic. Other sources include web sites (see Learn More). The state's Emergency Alert System (EAS) may provide specific emergency instructions for you to follow. These radio stations will broadcast EAS messages:

Aiken/Augusta	WBBQ-FM 104.3		
Midlands	WCOS-FM 97.5		
Charleston/Low Country	WNKT-FM 107.5		
Florence/Pee Dee	WJMX-FM 103.3		
Myrtle Beach/Grand Strand	WKZQ-FM 101.7		
Greenville/Spartanburg/Upstate	WFBC-FM 93.7		

EAS messages will include instructions to protect the health of you and your family. These messages may include the closings of schools, businesses and government agencies.

### **Preventing Dehydration**

Dehydration occurs when the body loses too much water and it is not replaced fast enough. It can be very serious and it can happen faster than you think. Start giving liquids when the first flu symptom appears. Remember these useful tips:

- In addition to plenty of liquids, be sure to give ice chips and light food that is easy on your stomach. Examples of these foods are soups and broths.
- If the sick person has diarrhea and/or vomiting, give special liquids that contain electrolytes. These liquids are available at drug stores and grocery stores. You can also make your own rehydration electrolyte drink for persons over the age of 12.
- If drinking liquids makes the nausea worse, have the person drink one small sip at a time until they start feeling better.

### **Rehydration Electrolyte Drink for Adults and Teens**

4 cups of clean water 2 to 4 Tablespoons of sugar ½ teaspoon of table salt ½ teaspoon of baking soda

Mix all the ingredients until the sugar disappears. You can drink the solution at room temperature. You can add flavor to the solution by adding lemon juice or a sugar-free powdered drink like Kool-Aid. Do not boil the solution. Boiling will make it less effective.

# How to Contact Your Local DHEC Public Health Department

The South Carolina Department of Health and Environmental Control has regional offices located throughout the state. These regional offices are listed below:

### Region 1

(Serving Abbeville, Anderson, Edgefield, Greenwood, Laurens, McCormick, Oconee, Saluda)

Anderson Telephone (864) 260-5541 Greenwood Telephone (864) 942-3600

### Region 2

(Serving Cherokee, Greenville, Pickens, Spartanburg, Union)

Greenville Telephone (864) 282-4138 Spartanburg Telephone (864) 596-3333

### Region 3

(Serving Fairfield, Lexington, Newberry, Richland)

Telephone Number (803) 576-2900
(Serving Chester, Lancaster, York)

Telephone Number (803) 286-9948

### Region 4

(Serving Chesterfield, Clarendon, Darlington, Dillon, Florence, Kershaw, Lee, Marion, Marlboro, Sumter)
Florence Telephone (843) 661-4830
Sumter Telephone (803) 773-5511

### Region 5

(Serving Aiken, Allendale, Bamberg, Barnwell, Calhoun, Orangeburg)

Orangeburg Telephone (803) 533-7116

### Region 6

(Serving Georgetown, Horry, Williamsburg)
Conway Telephone (843) 365-3126

### Region 7

(Serving Berkeley, Charleston, Dorchester)

Charleston Telephone (843) 746-3800

### Region 8

(Serving Beaufort, Colleton, Hampton, Jasper) **Telephone (843) 525-7603** 



### **Use Emergency Medical Care Only When Needed**

It is very important <u>NOT</u> to go to the hospital except in the case of a real medical emergency during an influenza pandemic. Hospitals and other medical facilities will be flooded with patients during a pandemic. Many sick people will have to be cared for at home or at other non-hospital locations.

Call 911 only in the event of a serious, life-threatening emergency. But remember, the number of incoming calls resulting from an influenza pandemic may overwhelm the 911 system. Be prepared to use alternative ways to get medical help and find transportation to a medical facility.

# What You Should Know

Pandemic influenza is a worldwide outbreak of a flu virus that is completely new to humans. People tend to get sicker from a pandemic flu than from normal seasonal flu. Humans have never been exposed to the virus before. Their bodies haven't built up much protection or immunity to it. A pandemic flu could spread easily from person to person. Outbreaks would come in waves. These waves could last months at a time. A pandemic could sicken or kill millions.

People's everyday lives could change in major ways during a pandemic. Schools might need to close for a while. Public transportation could be limited and air flights canceled. Many people will be sick. Many employees will not be able to go to work. Businesses and public services might have to close or limit hours.

Scientists and health experts are closely watching a flu virus among birds in Asia, Europe and Africa. They believe the virus could change into a type that could be passed from human to human. The result would be a pandemic—and a public health crisis.

Experts predict that the first wave of a pandemic could infect from 15 to 40 percent of the people in South Carolina. So it's very important to plan ahead. Government agencies are taking steps to better prepare for and respond to a pandemic. South Carolinians also need to prepare themselves and their families.

# **ABOUT AVIAN FLU**

Avian influenza is also known as bird flu. Bird flu is very contagious among chickens, turkeys, game birds, waterfowl, and flightless birds like ostriches and emus. There are many different types of bird flu. Some are more serious than others.

Bird flu viruses rarely infect humans. But scientists are concerned about one particular type carried by birds in Asia, Europe and Africa. Scientists know the virus as H5N1. It's very rare for people to catch H5N1. People can only get the virus if they come in direct contact with the saliva or feces of an infected bird or if they eat undercooked poultry. But scientists warn that the virus could change in ways that would allow it to pass from human to human. That could cause a pandemic.

Bird flu can make birds like chickens and ducks very sick and can kill them. It is equally serious in humans. Some people in other countries have caught Asian bird flu from chickens and more than half of these people died. Scientists continue to watch this situation closely.

Bird flu symptoms last for up to 14 days. Symptoms usually include fever, cough, sore throat, muscle aches, shortness of breath and eye infections. The virus can cause life-threatening breathing problems including pneumonia. Treatment may include supportive care, use of anti-viral medicines, or even hospitalization.

You cannot get bird flu by eating properly cooked poultry or eggs.

Health officials recommend that you protect yourself against bird flu the same way you would protect yourself against seasonal flu or a cold (see What You Can Do).

# WHAT YOU CAN DO

Reduce your chances of getting sick and help limit the spread of disease. Begin by building up your body's defenses. You can do this by eating a balanced diet, exercising daily, getting enough rest and drinking fluids.

### You should also do the following:

- If you get sick, it is critical that you stay home and stay away from others. This includes not going to work, church, or other activities outside the home.
- Don't send sick children to school. Avoid close contact with people who are sick.
- Get a seasonal flu shot as it may help build up your immunity against pandemic flu.
- Wash your hands often with soap and water or use an alcohol-based hand sanitizer.
- Cover your coughs and sneezes with tissues. Put used tissues in the trash, then wash your hands. Cough or sneeze into your sleeve if you do not have a tissue.
- Clean and disinfect commonly shared surfaces, such as door knobs, telephone receivers, cell phones, TV remotes, sink and shower handles, and countertops.
- Stay informed by keeping up-to-date on a possible pandemic influenza by watching television, listening to the radio and reading newspapers.
- Monitor developments in South Carolina by visiting the DHEC Web site at http://www.scdhec.gov/panflu.

# YOUR PANDEMIC FLU EMERGENCY KIT

As many as 1 in 4 people in South Carolina could get sick during a pandemic. Businesses might have to close temporarily. Everyday services and supplies might not be available. The health care system may be overwhelmed and people may not have access to health services. Individuals and families must prepare to be on their own.

Make sure you have these items in your emergency preparedness kit:

- Two weeks worth of food that does not need refrigeration. Good choices include canned meats and fish, canned vegetables and beans, canned soups and juices, and dried fruits. Keep a two-week supply of dry goods like flour, salt, sugar, cereal, granola, protein and fruit bars and crackers. Remember to include canned or jarred baby food and pet food.
- Several days of water in sealed, unbreakable containers. Have at least 1 gallon per person, per day. Remember to store additional water for pets.
- Two weeks worth of prescription medicines.
- Two weeks worth of ibuprofen or acetaminophen (Tylenol) for each person in the house. This is for fever and pain. Store a two-week supply of cough medicine.

- Rehydration solution, such as Pedialyte for kids and Gatorade for teens and adults. To make your own solution for teens and adults, see Preventing Dehydration. For children, especially infants and toddlers, use a store-bought solution.
- Supply of face masks and plastic gloves. These will help protect you if you are taking care of family members who are ill.
- Disinfectants and chlorine bleach.
- Cell phone and charger.
- A list of phone numbers for local public health and safety agencies, local hospitals and clinics, your doctors, other family members, and your children's schools. Include both home and cellular numbers.

Learn more about making an emergency preparedness plan and kit from the American Red Cross. Call 1-800-REDCROSS (1-800-733-2767) / 1-800-257-7575 (Español) or visit their Web site at http://www.redcross.org.

# Seasonal Flu

# Pandemic Flu

There are some key differences.

### **SEASONAL FLU**

- It tends to follow a predictable pattern, typically appearing each winter.
- Most people have had it before, so their bodies have built up some protection.
- Healthy adults rarely suffer serious complications.
- Health care providers can usually meet the needs of patients.
- Drug companies can use known viruses to develop vaccines before flu season begins.
- Antiviral drugs are usually available.
- On average, 650 South Carolinians are among the 36,000 Americans who die from seasonal flu every year.
- Regular symptoms include fever, cough, runny nose, and muscle pain.
- Although sick people miss school and work, seasonal flu outbreaks typically make a small impact on communities and the economy.

### PANDEMIC FLU

- It doesn't happen often. It has occurred only three times in the past 100 years, most recently in 1968.
- People have never been exposed to it, so their bodies have little or no immunity.
- It may cause serious complications even in healthy people.
- It could overwhelm hospitals and the medical community.
- Vaccines developed before an outbreak may not work. Even if an effective vaccine is developed, it could take months to actually produce it for public use.
- Effective antiviral drugs might not exist. If they do, the supply could be limited.
- The number of deaths would be much higher.
   South Carolina could have up to 3,600 additional deaths during the pandemic's peak. Worldwide, deaths could run into the millions.
- Symptoms would be more serious and there would be more medical complications.
- An outbreak could limit travel and business hours and result in school closings and cancellation of events. It could have a big impact on the economy.

# LEARN MORE

# Keep up-to-date on a possible pandemic flu by listening to radio and television and reading news stories about pandemic flu.

Go to **http://www.scdhec.gov/panflu** for more information and fact sheets on pandemic flu, avian flu, and isolation and quarantine.

Go to **http://www.cdc.gov** for general information about pandemic flu and other health related information.

Go to **http://www.redcross.org** for all the information you will need to make your own emergency preparation plan.

Go to http://www.pandemicflu.gov for updates on national and international pandemic flu.

### For Travel Information and Warnings

Go to <a href="http://www.cdc.gov/travel/destinat.htm">http://www.cdc.gov/travel/destinat.htm</a> for health related travel information.

Go to **http://www.who.int/** for health related travel information and international disease outbreak information.